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Miscellanea Curiosa.

Containing a

COLLECTION

OF

Curious Travels,

VOYAGES,

AND

Natural Histories

OF

COUNTRIES,

As they have been Delivered in to the

ROYAL SOCIETY.

VOL. III.

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VOL. III.

A Journal of a Voyage from England *to* Constantinople, *made in the Year*, 1668. *by* T. Smith, *D. D. and F. R. S.*

ON *Monday* Evening *August* 3, 1668. we took Barge at *Tower-Wharf*, and at *Greenwich* went on Board the *Bezant* Yacht for the *Downs*, where we arrived the next day in the Afternoon, and went on Board the *Leopard* Frigat, a Ship of 56 Guns mounted, Captain *O Bryen* Commander, appointed to carry Sir *Daniel Harvey*, his Majesty's Ambassador to the Port of the *Ottoman* Emperor at *Constantinople*. Here, upon his first Arrival, the Ambassador was Complemented by Sir *Jeremy Smith*, then riding Admiral, Sir *Edward Spragg*, and several other Commanders of the Men of War,

and afterwards Saluted with Fifteen Pieces of Ordinance by the Admiral, to whom we returned as many; then by the Vice-Admiral, and ſeveral other Ships. All which were anſwered together at the ſame time with 21 in the whole.

Here we were forced to Ride for ſeveral days, the Winds being contrary.

In the *Offing* between the *North Foreland* and *South Foreland* it runs Tide and half Tide, that is, it is either ebbing Water or Flood upon the Shore, in that part of the *Downs*, three hours, which is groſly ſpeaking the time of half a Tide, before it is ſo, off at Sea: (For the flux and reflux of the Sea is not made exactly twice in 24 hours, but, as it appears by accurate obſervation, it requires an overplus of almoſt 50 minutes.) The reaſon of this diverſity of Tides, I take to be from the meeting of the two Seas in that narrow Streight.

Oftentimes when the Wind has blown hard at N. E. or at W. or W. and by S. there has hapn'd an altertation of the Tides in the River of *Thames*, which ignorant People have miſtakenly lookt upon as a Prodigy.

It is a moſt certain Obſervation, that where it flows Tide and half Tide, tho' the Tide of Flood runs aloft, yet the Tide of Ebb runs under foot, that is, cloſe by the *ground*; and ſo at the Tide of Ebb, it will flow under foot, as that great and experienc'd Sea-Commander, Sir *H. Manwaring*, words it.

Auguſt 9. We ſailed from the *Downs*, but were ſoon forced back by diſtreſs of Weather, and came to an Anchor S. W. of the *South Foreland*. 10.

10. The Wind blew at S. S. W. and the Sea run very high, so that we were in danger of losing our Cable and Anchor; the Ground, where we rode, at 16 Fathom ½ water, being somewhat gruff.

15. The Wind coming about at W. N. W. we sailed, and were Saluted with nine Guns from *Dover* Castle, and seven from one Fort, and five from another. We carried a Flag upon our Main-top, after we came out of the *Downs*. The Wind in the Afternoon at N.E. brought us by seven of the Clock to the *Ness*, where we lay at Anchor during the Tide of Flood; during which time the Mariners caught good store of *Whitings*, baiting their Hooks with raw Mutton.

16. We were in the morning athwart St. *Helen*'s Point in the *Isle of Wight*; where we discovered Sir *Thomas Allen* with his Squadron under Sail, bound for the *Straits*.

17. In the morning we got to the West of *Portland*, the Wind at N. by E. our Course lying thereupon S. S. W. but about noon, sailing over part of the Race of *Portland*, where we met with a tumbling Sea, we Anchored at the N. W. part in the Bay, over against the Point that looks towards *Weymouth*. We were ashore in the Island, which seems to be but one continued Rock; the Soil in several places not being above five or six Inches deep, as I found by digging a hole with my Knife; yet the Corn flourishing enough. The Castle consists of a double Fortification; we could not observe above five Guns mounted. They told us, that in the Island there was but 1 Church, and 4 Villages.

We weighed at twelve of the Clock at night: But

18. The Wind blowing fiercely at W. directly in our teeth, we made but little way, and could not weather the *Start* Point that night. The Moon upon its firſt emerging above the Horizon, ſeemed to have a colour like burnt Brick, the Sky very cloudy: but ſome Rain falling, as ſhe advanced higher and higher, ſhe appeared more and more fiery.

19. We weathered the *Start* Point by noon, but could not make much way beyond it.

20. We got into *Plymouth* Sound. The Cittadel, built upon a Rock, with large Counterſcarps and Baſtions, returned our Salute with nine Guns. Sir *Thomas Allen* with his Fleet ſtood to the Lizard, and came not to an Anchor.

21. Miſty Weather. About eleven Clock Forenoon, and about ſix in the Evening, we obſerved the Vapours in great quantity aſcend out of the Sea, ſoon covering the tops of the Mountains. Here we ſtaid three days, taking in ſome Proviſions, ready prepared for us.

On *Sunday* the 23*d* of *Auguſt* we weighed out of *Plymouth* Sound, and made the *Lizard*, a Promontory in *Cornwall*, before night: The *Manacles*, ſeveral Rocks ſo called, we diſcerned very diſtinctly, it being then low Ebb; as alſo the Lands end. The Wind blew freſh; and we obſerved the Waves in the Night-time, as if they had been liquid Fire, but paliſh.

The

The *Lizard* bearing N. of us, we changed our Course, and taking leave of *England*, we sailed into the Ocean. God of his Mercy send us a happy Voyage.

24. We run this day thirty nine Leagues by a Compute from our Log-line.

25. We were full open with the *Bay of Biscay*. Several *Gulls* were hovering over the Surface of the Water to catch Fish, which swam by in vast sholes, at about 50 Leagues distance from any Land.

At other times I have seen several Birds floating upon the Water, which being driven by some Tempest from the Coasts of *Spain* and *Portugal*, have been tired in their flight, and so drowned. This happens frequently in the great Ocean, where they meet with no Land to fly to in several hundreds of Leagues; and sometimes even in the *Mediterranean*, in the Mid-Seas between the *Christian* and *Barbary* Shores. In blowing Weather, among other Birds flying cross, we saw a Hawk making to our Ship, then under good and swift Sail, which perched upon the round-top of the Main-mast; which one of the Seamen espying, he presently run up the Shrouds, and brought down the Hawk, which made no attempt to fly away, being quite spent. But not long after, the Hawk recovering his Spirits by rest and meat which was given him, took wing and got away from the Fellow, notwithstanding all the care he took to secure his new Adventure, which he hoped to have made Mony of at the next Port that we should come to.

26. A ſtrong Levant ſtill blowing, and the Sea very rough and boiſterous, the Gale continuing almoſt right a ſtern, we run theſe 24 hours above 70 Leagues.

27. We found our ſelves by our obſervations, that we were in the Latitude of 42 degrees 17 minutes, and began to be very ſenſible of our nearer approach to the South, the Weather being exceſſive hot. In the Afternoon we heard the report of ſeveral Guns fired at about ſeven or eight Leagues diſtance, as we gueſſed. At eight of the Clock at night another Gun was fired ſomewhat near us, which we thought might be from an *Algerine* Man of War, who gave a ſignal to his Conſorts, and who anſwered by ſeveral flaſhes of Powder. Whereupon our Trumpeters ſounded a Point of War, but no return was made. However, the Captain quartered his Men, and the Decks were cleared, and all things made ready in order to a Fight the next Morning; as ſoon as day appeared, we ſaw the Sea clear, no Ships being in view any way: ſo that we concluded that they were Merchant-Ships, with their Convoy, ſtanding to the Northward.

28. Dreadful Lightnings in the Clouds towards the Evening; after which great Dews fell: the Weather extream hot.

29. We ſaw a Pilot-fiſh ſwim by the ſides of the Ship, and ſeveral Bonito's and Albicores playing, as it were with their Heads above Water. The Wind took us ſhort in the night, and ſoon after there was a ſtark Calm; and we had great reaſon to bleſs God for it: For had we continued our Courſe

that

that night, we had either run a-ground, or had been caſt upon the Rocks near to *Peniche* in *Portugal*. The fault was miſ-reckoning, and haling in too ſoon to make the *Southern Cape*: though the Seamen, to ſalve their Credit, and to excuſe their Error, which had like to have proved ſo fatal to us, pretended that we were ſet in by a ſtrong Current. God make us thankful for this great Deliverance.

30. This Morning we were ſurprized to ſee our ſelves within four or five Leagues of the Shore, when we had thought that we had been above twenty. In the Afternoon, the Wind coming on freſh, we weathered the weſtermoſt Iſle of the *Barlings*. On the greateſt of which, being as we gueſſed, above half a Mile in length, the *Portugueſe* have built a Fort to hinder the *Barbary* Pirates from careening their Ships there, or taking in freſh Water. The Land of it very high, and bore off us S. E. by E. By it lie ſeveral Rocks. The other Iſlands are diſtant about a League. I told five of them: the greateſt of which laſt lie ſomewhere inward to the Shore.

For two Nights together about this time (28 and 29) the Sky being very hazy, the Sun ſet in a colour as deep as Blood, which was very aſtoniſhing. We were then in the Latitude of 40.

31. Betimes in the Morning we ſailed by the Rock of *Lisbon*, at ſome diſtance, which was ſcarce diſcernible by reaſon of the cloudineſs of the Weather. Two *Turks* Men of War are now plying to the Windward of us;

but dare not come up to speak with us, perceiving that we are only laden with Powder and Bullet.

September 1. In the Morning we made Cape *St. Vincent.* I went on Shore with the Lieutenant and several others in our Pinnace, which we drove into one of the Coves; and were forced to climb up a Rock, the ascent of which was very dangerous and troublesome; and made more so by the Rays of the Sun, which were reflected with that vehemence, that the Heat was almost intollerable. Having gained the top, we were met by an Officer and some Soldiers, who had us into the Castle, the middlemost of the three, which are built along that Promontory for the Security of the Coasts, and entertained us with Wine, Grapes, and Marmalade. They told us, that a Squadron of English Men of War sailed by the day before. We here met with two Vessels belonging to *Dartmouth*, laden with Fish from *Newfoundland*, bound for *Alicant.* All along the Coasts, at the distance of about two or three Leagues, are several Watch-towers built to give notice of Pirates.

Becalmed for the most part these two or three days.

5. In the Morning we weathered the Point of *Cadiz*, and came to an Anchor in the *Bay of Bulls*, about half a League from the great *Porgoe*; and in the Afternoon went on shore. We were entertained by the *English* Consul, and carried by him to view the Fortifications, which are esteemed to be as regular as any in *Christendom*; built in the same place

where

where the Town had been attacked formerly by the *English*, under the Conduct of the Earl of *Essex* in the Reign of Q. *Elizabeth*. Plays are usually here, as in other parts of *Spain*, acted on a *Sunday*. During the time of our stay, was represented the History of the Patience of *Job*, the Devil brought upon the Stage, tempting *Job*'s Wife in a drolling way, which caused great Laughter and Merriment among the Spectators. At *Malaga*, as the Merchants told us, the *Sunday* before we arrived there, was acted the *Schism of England* in the time of King *Henry* the Eighth, whom the *Spaniards* will not yet forgive, for Divorcing himself from Q. *Catherine*, their Country-Woman.

9. We sailed from *Cadiz*.

10. This Afternoon we were forced to Anchor, not far from *Cape Spartel* or *Sprat*, as the Seamen call it, not being able to weather the Point.

11. This day we came to an Anchor in *Tangier-Bay*, with Sir *Thomas Allen*'s Squadron.

Tangier lies within the Entrance into the *Strait* of the *Mediterranean*, in the Latitude of about 35°, 36'. It is situated in the bottom of a Bay, and is built on the side of the Hill, overlooking the Sea, encompassed with high Walls to the Land-ward, and commanded by a strong Castle. The Heats would be very troublesome but for the Sea-breezes which cool and fan the Air. In the Castle I met with a *Roman* Monument, erected to the Honour of *P. Belius*, a great Officer and Souldier in *Trajan*'s time; who, among his

other

other Titles, is there stiled, PPO. FIG. MAURITANIÆ. TINGITANAE: which since has been taken away, and presented to the University of *Oxon* by Sir *Hugh Cholmondley*, and now serves to adorn the *Area* about the *Theatre*.

The *English* have two Churches here, (though they only make use of one, the other being reserved against all Accidents) both of them very neat and convenient; though not to be compared with the Church of the *Portugueſe*, retained still, according to the Articles of Agreement, when the King of *Portugal* made over the Right and Title, and gave the Possession of *Tangier* to the Crown of *England*, by the Canons Regulars, belonging to it, which is very stately, and adorn'd with rich Images, and supported by Marble Pillars. Toward one end of the *English* Church, just by the Vestiary, which had been formerly a *Turkish* Mosch, and afterward the Chappel of a Convent of *Dominicans*, is a Monumental Stone-Table in *Arabick* Characters, containing an account of the Houses, Lands, and other Revenues belong-to it, set up in the 743 year of the *Hegira*, that is, of Christ 1341. The Mole is in good forwardness, they having gained above 200 yards in the Sea, in order to the making of a good and safe Harbour for Ships to ride in, which lye open to Wind and Waves; the out-ward side to the Sea-ward somewhat sloping. The Garrison is in so good a posture of Defence, that they defie *Taffiletta* and all his Forces. Here we met with great Civilities from Colonel *Norwood*,

Deputy-

Deputy-Governour, and the Gentlemen belonging to the Garrison. Sir *Harry Mildmay* and Mr. *Goodland*, two of King *Charles* the First his Judges, are here; but who have the Liberty of the Town. Now, at our being here, come in several *Moors* from *Arzilla*, and among the rest, the Father of one of *Gayland*'s Wives, to get a Passage for *Algiers*.

Old *Tangier* lyes at some little distance, where they find very frequently in digging several pieces of *Roman* Coin. But for the above-mentioned, and the other Curiosities and Antiquities of *Tangier*, of which I forbear to make mention, from the imperfect and hasty Observations of two days, the greatest part of which being taken up by the Entertainment of our obliging Country-men, you may consult with great pleasure and satisfaction, a little Book called *The present State of Tangier*, written by a very ingenious Gentleman, and printed in the Year 1676.

There is a vast *draught* of *water* poured continually out of the *Atlantick* into the *Mediteranean*, the mouth or entrance of which between *Cape Spartel* or *Sprat*, as the *sea-men* call it, and *Cape Trafalgar*, may be near 7 leagues wide, the *current* setting strong into it, and not losing its force till it runs as far as *Malaga*, which is about 20 leagues within the *Streights*. By the benefit of this *Current*, tho' the wind be contrary, if it does not over-blow, *Ships* easily turn into the *gutt*, as they term the *narrow passage*, which is about 20 miles in length. At the end of which are two Towns, *Gibraltar* on the coast of *Spain*, which gives denomination to the *Streight*,

Streight, and *Ceuta* on the *Barbary* coast: at which places *Hercules* is supposed to have set up his *Pillars*. What becomes of this great quantity of water poured in this way, and of that, which runs from the *Euxine* into the *Bosporous* and *Propontis*, and is carried at last through the *Hellespont* into the *Ægæan* or *Archipelago*, is a curious *speculation*, and has exercised the wit and understanding of *Philosophers* and *Navigators*. For there is no sensible rising of the *water* all along the *Barbary Coast*, even down to *Alexandria*, the land beyond *Tripoli*, and that of *Ægypt*, lying very low, and easily overflowable. They observe indeed, that the water rises 3 feet, or 3 feet and an half, in the *gulph* of *Venice*, and as much, or very near as much, all along the *Riviera* of *Genoa*, as far as the river *Arno*: but this rather adds to the wonder.

I here omit to speak at large of the several *Hypotheses* which have been invented to solve this difficulty: such as *subterraneous vents*, cavities and indraughts, *exhalations* by the *Sun-beams*, the running out of the water on the *African side*, as if there were a kind of circular motion of the water, and that it only flowed in upon the *Christian* shore: which latter I look upon as a meer fansy, and contrary to all observation.

My conjecture is, that there is an *undercurrent*, whereby as great a quantity of water is carried out, as comes flowing in. To confirm which, besides what I have said above about the difference of tides in the *offing*, and at the *Shore* in the *Downs*, which necessarily supposes an *under Current*, I shall present you with

with an instance of the like nature in the *Baltick Sound*, as I received it from an able Seaman, who was at the making of the tryal.

He told me, that being there in one of the *King's* Frigats, they went with their *Pinnace* into the *middle stream*, and were carried violently by the *Current*: that soon after they sank a *bucket* with a large *Cannon* bullet to a certain *depth* of water, which gave check to the boats motion, and sinking it still lower and lower, the *boat* was driven a-head to wind-ward against the upper *Current*: the *current* aloft, as he added, not being above 4 or 5 *fathom* deep, and that the lower the bucket was let fall, they found the *under-Current* the stronger. I designed to have made the *Experiment* in the *Streights-Channel*; but both times I past, the Easterly wind blew so hard, that there was no putting out the boat with any safety; nor indeed at those times had we any leisure for such a *Curiosity*; which those, who liv'd at *Tangier*, might have tryed without any difficulty or danger.

This conjecture, how likely or unlikely soever, will stand or fall according to the certainty of the *Observations*, whih shall be made there, which I will endeavour to procure in order to the further establishment, or utter overthrow of it.

13. We weighed out of *Tangier* and turned into the *Strait*, though against the Wind. The distance between *Gibraltar* Cape, which gives name to the *Straits*, and is joyned to the Continent of *Spain* and *Ceuta* a well-built and strongly fortified Town, lying under the Hill *Alybe*, called so by the *Greeks*, which

the

the Seaman commonly call, as do some *Spanish* Writers, *Apes-hill*, from the great number of Apes which used formerly to haunt there, (at which places *Hercules* is feigned to have set up his Pillars) may be about six Leagues; tho' both Lands lying very high (for we saw the Clouds much below them) it does not appear in the middle of the Current, out of a tall Ship, scarce half so broad.

14. Little Wind stirring.

15. A great Mist all the Sea over, so that we could scarce see three lengths of the Ship, which began to vanish in the Afternoon; and than we descryed the *Cape of Malaga* at about four Leagues distance; and came to an Anchor that Night. The City lies under a high Hill, and is the Seat of a Bishop, who is at this time a Natural Son of King *Philip* the Fourth, of the Order of St. *Dominic*. Here the Merchants told us, that it had not rained for seven Months together, except a day or two for an Hour: and that the *Algerines*, who were then breaking with us, had not been able to have set a Fleet to Sea about two years before, if they had not been furnished with Masts from *England*; and that they were now in Expectation of another Ship laden with the same, notwithstanding the Rupture, which was as good as began. I only make a Query, Whether *Jews* or *English* Men were the Fraighters?

16. The next Morning the Governour immediately returned our Salute Gun for Gun: soon after we weighed from *Malaga* Road, the Weather very hot. Some Rain fell at Night, though very moderately. In the

Eve-

Evening, after we had ſailed about eighteen Leagues, we were becalm'd. The Sea being quiet, we ſaw a great number of *Tortoiſes* ſwimming above Water, ſeveral *Bottle-noſes*, fiſh of about three yards long, and very thick, and Hawks flying over to the *Barbary* Coaſt. The Hills of *Granada* were ſeen plainly by us, though at a great diſtance.

The Wind coming Eaſterly, we kept at Sea, beating and plying to and again for theſe four days, ſcarce gaining ſixteen Leagues of our way, and were forc'd to come to an Anchor in the *Bay of Adera*, where there is a ſtrong Cittadel, about thirty four or thirty five Leagues from *Malaga*.

21. We paſſed by *Cape de Gata*: but the Levant wind ſtill blowing, having continued almoſt in that Point for above two Months, as we computed from what they had told us at *Tangier*, we could make but little progreſs in our Voyage.

25. Between three and four of the Clock in the Morning the Tornado's began to blow, and the Wind violent for the time, with ſuch continued Flaſhes of Lightning for ſeveral hours, as that the whole Sky ſeemed to be on fire, intermixed with terrible Claps of Thunder, after which followed great ſhowers of Rain.

26. The Wind ſtill contrary, we deſcryed *Cape St. Martin* at about fifteen Leagues diſtance. Tacking about and ſtanding off to Seaward, next Morning 27. we found that we had loſt about three Leagues of our way.

28. We were athwart *Orlando's Gap* within two Leagues of the Shore, *Cape St. Martin* bear-

bearing off us *N.* by *W.* The Wind now still; but a swelling Sea coming from the Westward, which is usual before a Wind, which drives the Water before it.

On *Michaelmas-day* we were up with the Island *Ivica*, or *Iviſe*, as the Mariners call it, and the Wind blowing fair, we stood our Course; and the next day at Noon we made the *Island Majorca*, situate over against the Kingdom of *Valentia*, and came to an Anchor in the *Bay* of the City, being forced in hither for want of fresh Water. In the Afternoon the Boat was sent on shore; but the Vice-Roy would not give us Prattick, not bringing a Patent from *Malaga*.

Octob. 1. The Secretary was sent with the King's Pass to the Vice-Roy to demand Prattick, who presently summoned the Officers of the *Sanita*. After long Debates and Delays they consented, and came to the *Mole* to receive him. He went directly to the Governour to acquaint him, that we were ready to Salute the City with what number of Guns he pleased, if he would engage upon his Honour to give us as many. He replied, that he would give us three for five; and wondered, that we being but a single Ship, should make such a Demand. The Secretary told him, That we were to be treated as an Admiral, having a Flag on our Maintop; and that the Governour of *Malaga* had done it. To this he said, That *Majorca* was a Kingdom, that he was the King's Representative, and that by Reason of the Miscarriage of his Predecessor, when Monsieur *de Beaufort*, the *French* Admiral was there,

there, he had received strict Orders from *Madrid* not to do the like. The Secretary replyed, That we had an Ambassador on board, and had as strict Orders, and should answer as severely for the Breach of them. His last Answer was, That we might, with our Sails loose, keep before the Town, till we had furnished our selves with what we wanted. Upon receiving this Message, the Ambassador dispatched away one *Joseph Gabriel Cortez*, a *Spaniard*, but employed by the *English* Merchants trading to that Island, then on board our Ship, to acquaint him, That when we were ready to go away, we would loose our Sails, and not before. We landed within the *Mole*; the Walk upon it about four or five Yards broad; at the Extremity of which is a very large and stately Gate, which leads into the City. We went into the great Church, somewhat wider than *Westminster-Abbey*, but darkish within: the Portal very magnificent, adorned with several Marble Statues in Niches one over another. The High Altar very plain and unadorned: but others extraordinary rich and glorious. Not far from the City are several Mills to grind their Olives, Oyl being the great Commodity of the Island.

2. The next Morning we weighed, without taking any kind of notice of the Town, sailing all along in sight of the Island, which presented us with a pleasing and delightful Prospect; the Valleys, lying under the Hills, fruitful of Wine and Corn. The whole Island is judged to be about sixty Leagues in Compass, and in length about fifteen: which we

sailed from the Westermost Point, where lies the Isle *Dragovera*, at a very little distance to the Eastermost, where there is built a small Fort. To the S. S. E. lie several little Islands, called the *Cabreas*; between which and *Majorca* we steered.

3. We were athwart *Port Maon* in *Minorca*; a fine level Country, having but one Hill in it N. W. by W. as it bore off us. In the Evening the Wind very scant.

4. This day, as yesterday, excessive hot.

5. In the Afternoon we descryed the Main Land of *Provence*.

6. We were over against the Islands *Hieres* and the Highland of *Thoulon*.

7, 8. These two Days becalmed; and the Sea extraordinary smooth.

9. We were over against the Westermost part of the *Alpes*, which we distinctly saw at about twenty Leagues distance, and appeared far higher than the Hills of *Granada*.

10. We sailed by *Final* and *Ventimiglia*.

12. We came in the Morning to an Anchor over against the *Mole*, and not far from the Lantern in *Genoa*. Having obtained Prattick of the *Maestri della Sanita*, after a little demur about the Salute, the Senate being assembled, and some of them protesting upon their Honours, and ready to produce their Registers, that they never saluted the Ship wherein was an Ambassador of *France* or *Spain*, as not taking any notice of the Person who did bear that Character, 'till they had first intimation, that the Ship was arrived in their Port by its saluting the Town. It was agreed that the Ship should Salute the

Town

Town with eleven Guns, which they were to anſwer, as they did, with an equal number: and after a little pauſe, they ſaluted the Ambaſſador with nineteen more, which was anſwered with as many. After this, the Duke and Senate ſent the Maſter of the Ceremonies to wait upon the Ambaſſador: who going away, returned ſoon after with a Preſent of Calves, Fowl, Wine, Sweetmeats, *&c.* and acquainted his Lordſhip, that they had deputed ſix of their Gentlemen to Complement him, and wait upon him; which Civility he thought fit to refuſe, deſiring to be *Incognito.* But however, going aſhore, he was welcomed by the the *Illuſtriſſimi Signiori*, the *Durazzo's*, two Brothers, the elder of which had been Ambaſſador for the Republick, in the Court of *England*, and the other at *Conſtantinople*, and by them carried to ſee the *Villas* out of Town. The figure of *Genoa* is Semicircular, beginning from the Lantern Weſtward, lying under an high Hill, upon the riſing of which the ſeveral Houſes, built of Marble, afford a very fine Proſpect, and add much to the Beauty and Glory of the place. *Strada nuova* perchance is the moſt ſtately Street in the whole World. The new Church of the *Annunciata*, built by the *Lomellini*, where a thouſand may go up the ſtairs abreaſt at the ſame time, for curious Painting, rich Altars, and exactneſs of Architecture, incomparable. The *Duome* alſo and the Church of the *Theatins* very ſtately and curious. Other matters I purpoſely omit.

14. In the Evening we ſet Sail from *Genoa.*

Becalmed for the moſt part theſe three Days, though helped ſomewhat forward by the Breezes that blew off the ſhore after Sun ſet.

18. In the Afternoon we made the Iſland *Gorgonia*, about nine Leagues from *Livorne*; a little round Iſland, with a Caſtle on the top.

19. In the Morning we came to an Anchor in *Livorne* Road, about a Mile from the Town: the Road large and ſecure, eſpecially to the Northward. The Ambaſſador keeps on Board, the Governour refuſing to Salute the Ship firſt, though he had formerly ſaluted the *French*; pretending that every Convoy might carry a Flag; and alledging that his Maſter, the Grand Duke, was as great and abſolute, as the Republick of *Genoa:* and that they had rather throw themſelves upon the King of *England*, than do a thing which might prove of ſuch an ill Conſequence. Sir *John Finch*, his Majeſty's Reſident, together with Sir *Thomas Baines*, came from *Florence* to Complement the Ambaſſador, and immediately diſpatched away a Courier to the Grand Duke about the Salute; who referred the whole Affair to the Governor: and he making a Proteſt that he was ready to pay all the reſpect which was due to the Ambaſſador's Character and Quality, upon the forementioned Pretenſions, ſix days, after our arrival, abſolutely refuſed to Salute the Ship firſt.

Livorne is the great Magazine of Trade for the *Levant*, being a free Port: Merchants of all Countries residing here, *Armenians* especially, and *Jews*; which latter enjoy great Priviledges, without wearing any distinct Mark in their Hats or Habits, whereby they may be known. They are allow'd the publick Exercise of their Religion: their Synagogue large and handsome. The Port inward has a *Mole* for the Duke's Galleys and other small Vessels to ride in: the Entrance of which is chained up every Night. Hard by is the Statue of Duke *Ferdinand* in Marble, raised upon an high Pedestal; under which are four Slaves in Brass, in different Postures, very large, and above the ordinary proportion, but done with exquisite and admirable Art. Two Castles to the Seaward well fortified: the Town Walls very high, and the four Gates strongly guarded: below which is a Ditch of about fifteen or twenty yards over, and very deep. No Stranger is allowed to view the Works, nor Souldier permitted to come out of the Castles. About four thousand Slaves are there, as the Merchants told us, who are lockt up in the *Bagno* every Night. The *Piazza*, where the Merchants meet, is adorned with Marble Pillars, which sustain the Portico's: at the East end of which is the great Church whose Roof appears very glorious, having several Circles richly gilded and painted with curious Figures.

The broad Street is paved between two and three yards on each side with Free-stone.

27. In the Afternoon we weighed out of *Livorne* Road, and sailed by the Islands *Gorgonia* and *Capraria*, seeing *Corsica* at a distance.

28. We lay beating at Sea all this Day, the Wind being contrary.

29. This Day we were forced back, the contrary Winds still continuing.

30. We weighed a second time, and sailed by three small Islands, *Capraria*, *Planasia*, and *Monte Christi*. We saw also *Gigio* and *Sanuti*, two other small Islands near the Main: but we made but little way, by reason of ill Weather for 4 or 5 Days.

Novemb. 5. At Evening we saw the Eruptions of Fire from *Stromboli*, which lies to the N. W. of *Sicily*. Sometimes it flamed very bright Light as a *Beacon*, at other times there appeared only a glorious kind of Light, like that of an ordinary Star when the Air is thick and hazy. They say that it flames most in rainy Weather.

6. In the Morning we were up within a League of it, and plainly perceived it to smoke. It is of a round figure, and, as we gathered, may be about three or four Miles in compass. It bore W. by S. of us. Not far from it lye scattered several other Islands, called by the Ancients *Æoliæ* and *Vulcaniæ*: among which are *Lipara*, a long flattish Island, and *Vulcanello*, which smokes most. This Afternoon we came to an Anchor in eight Fathom Water in the *Phare* of *Messina*, in the mid Stream between *Scylla* and *Charybdis*: a violent and strong Current setting against us, and the Wind not high enough, so as to be

be able to stemm it. The breadth of the *Strait* from *Messina* to *Rhegium* may be about a League. The Land is very high on the *Calabrian* side, where are very steep Rocks, and great depth of Water, above 150 Fathom, as they told us: but on the *Sicilian* side, near *Charybdis* Shole-water, and usually an Eddy. On the Sandy Banks stands the Phare or Watch-tower. Several Currents meeting in this narrow Passage, cause a great ripling of the Water: and great quantity of Water coming in, as the Winds drive, in great quantity meeting with the Shole, is broken into Waves. The Eddies here are caused by the meeting of the different Currents by which the Waters are sometimes carried N. and sometimes S. the great danger is, lest they drive the Ship on either side. We have had Lightning for seven or eight Nights together.

7. We sail'd by *Ætna*, now called *Mongibel*, where the Sea widens ten or eleven Leagues over. Now we see plainly the Smoke briskly issuing out of the *Crater*, the *Limbus* of which was all black. The uppermost part of the Mountain was covered with Snow, except some streaks of Ashes, as we judge, which lie as it were in a Gutter, spread here and there.

8. We espied a *Saettia* at about 3 Leagues distance, and making up to her, found her forsaken. The Captain sent several Sea-men on board, and carryed the Vessel to *Smyrna*.

Scanty Wind for several Days: and the Lightning still continued.

13. We were up with *Cape Modona*, the Southermost Cape of the *Morea*, and sailed by *Coron*. The Land very high, the Hills of *Arcadia* lying Eastward from us. The Weather excessive hot at this time, as it is in *England* at *Midsummer*. We espied from our Maintop-mast five Sail of great Ships, which we supposed to be *Tripolines*, who did not think fit to come up and speak with us. But afterward we heard for certain, that they were part of the *Venetian* Fleet.

14. We lay for the most part becalmed over against *Cape Matapan:* but in the Evening the Wind blowing fresh, we sailed between the Island of *Cerigo* and the Main Land of *Greece*; it being about three Leagues over to *Cape Angelo*.

15. We entred the Arches, and steered through the North Channel, leaving *Melo* and *Antimelo* on the Starboard-quarter, at some Leagues distance.

16. Betimes in the Morning we were athwart *Negropont*, and sailed between it and *Andros*. The *Bocca* lies S. W. and N. E.

17. We sailed by *Chios* or *Scio*, which is very mountainous toward the middle. It is about four Leagues distant from *Cape Caraboroun*, or the *Cape of the black Nose*, as the *Turkish* word signifies, which the Seamen, in their usual way of corrupting Names, call *Cape Jobbernoule*, the *Corinæum* of the Ancients, a Promontory of the famous Mountain *Mimas*, which runs along the Southern side of the *Bay of Smyrna*.

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This Day the *Smyrna* Fleet from *England* comes up to us very luckily, to our great Satisfaction and Joy.

18. We are now got into the *Bay of Smyrna*, and come to an Anchor without the Castle, not far from St. *Jacomo's Point*, as the Seamen call it, or rather *Sangiac Point*. In the Afternoon the Consul, with several Gentlement of the Factory, came to wait upon my Lord Ambassador, and desired his Lordship to defer his Entrance into *Smyrna* till the Twentieth, that he might be received with greater Honour. That Evening we heard a great howling of *Jackalls* upon the Hills.

20. The Consul with the Nation, accompanied with his *Druggermen* and *Janizaries* in their *Habit*, together with several *French*, *Duth* and *Geneose* Merchants, residing in that famous Emporium, came to the Village near the Castle, who there expected us with Horses. Upon our going ashore, the *Leopard* fired fifty one Guns. We made about 140 Horse; and immediately upon our setting forth, we rode for about three Miles together under the Hill to the S. W. of *Smyrna*; the places adjoyning set thick with Olive, Fig, and Almond-trees. Afterwards we clambered over some rocky Ascents; but the Horses of the Country being sure-footed, we were in no danger of falling. Some little way we were forced to ride on the Sea-shore, and soon after came to the Jews burying place, whose Monuments lie flat upon the ground. As soon as we entred into the City, we found the Streets full of *Greeks*, *Armenians*, *Turks*, and

and *Jews*, whom Curiosity had drawn together to see and observe our Cavalcade; the *English* Ships, which were in the *Bay*, firing their Guns, as we past near the Shore. And so after three hours riding the Ambassador was brought to the Consul's House, where Lodgings were provided for him. During our stay we met with not only kind, but very noble Entertainment from the worthy Gentlemen of the Factory.

Decemb. 8. We took our leave of *Smyrna*, being accompanied by the Consul and Merchants on board the *London-Merchant*, Capt. *John Hill* Commander, the *Leopard* being ordered to go no further than *Smyrna*, it being feared in *England*, that if she had sailed up to *Constantinople*, the *Turks* might have press'd her for their Service in *Candia*, which they were then besieging.

9. This Morning we weighed betimes, and sailed between *Scio* and *Mytilene*. But on the

10. We were forced back near the long Island within the Bay, being unwilling to go to *Scio*, the *Tripolines* and *Turkish* Galleys lying there. Here we lay ten Days, expecting a fair Wind.

20. The Wind coming about and favouring us, we sailed a second time between *Scio* and *Mitylene*.

21. We past by *Lemnos*, and were up with the Island *Tenedos*; a fine Champaign Country, only with one Hill toward the middle of it. The Castle to the N. E. part of the Isle: over against which lye three small Islands in a strait Line. Here we came to an

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Anchor. We saw the Ruins of *Troas* at a distance, but did not think it safe to go ashore.

22. The Wind coming about at S. we entred the *Hellespont*, which may be about two Leagues and a half over. The Castles built upon the opposite points of Land, about 11 or 12 Years before, after the great Defeat given the *Turkish Armata* at the *Dardanels* by the *Venetians*; *Cape Janizary* on the *Asian* side; which, with the *Philæum*, makes a tolerable good Bay for ordinary Vessels. The narrowest Strait of the *Hellespont* is at the two other Castles, distant about six Leagues, where it may be about $\frac{3}{4}$ of a Mile wide. These the *Christians* call the *Dardanelli*; at which are situate the Towns, *Sestus* and *Abydus*, famous in *Greek* Poesie. These Castles we saluted with our Guns and Trumpets, as we did the first: but each, whether out of Pride, or out of Covetousness, to save the *Grand Signior*'s Powder, return'd us no more than two Guns. The Wind blowing very fair we sailed into the *Propontis*.

23. We passed by St. *Stephano's Point*, where we had a full view of the S. E. Angle of *Constantinople*, which being situated upon several Hills to a mighty advantage, what with the Cypress-Trees intermixed, and what with the gilded Spires of the *Moschs*, yielded us a very diverting glorious Prospect. Passing by the *Seraglio Point*, which we saluted by a discharge of several Guns, in the mid Stream between it and the *Tophana*, we came to au Anchor.

26. On St. *Stephen*'s Day the Ambassador landed at *Galata*, (having before been visited by the Earl of *Winchelsea*, and the Merchants residing there) and was received there by the *Chiaus Basha* and the *Vaivod* of *Galata*, the *Janizaries* and *Chiauses* attending, and was waited upon by them to his Palace: and soon after the *Kaimacam*, or Governor of *Constantinople*, sent an Officer to Complement him upon his Arrival; the *Grand Signior* being then at *Lariſſa* in *Theſſaly*.

January 2. The Ambassadors, Old and New, went over to *Constantinople*, that Morning being assigned by the *Kaimacam* to give them Audience; the *Chiaus Basha* and other Officers attending at the Water-side to receive them; Horses being brought thither for them and their Followers to mount. This *Kaimakam Jusuph*, a little old Man, had formerly been a Page of the Chamber, and chief Falconer, and afterwards *Basha* of *Silistria*. He entertained the Ambassadors and their Company with Perfumes, Coffee, and Sherbet, and distributed about fifteen *Koftans Orrests* among them: after about an Hours stay they took their leave.

Being upon the Coasts of *Greece* about *August* or *September* 69. in the Latitude of 35°. 53′. we found by our *Azimouth* Compass, that we had Westerly variation there 5°. 22′.

The variety of Colours of the Sea-Water at several times chiefly depends upon the Wind and Weather, and the reflexion of the Light upon it. It's usual and most

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natural Colour is a deep Green: but in Cloudy and Rainy Weather, the Surface of the Water appears blackish. On the *Goodwins* upon the Tide of Flood, the Water was white, the Waves by reason of the Shallows, meeting with opposition, and breaking into Foam, till the Flood is well advanced. Sometimes the Water is of a perfect Azure colour, as we observed for several Weeks in the *Mediteranean*. The Sun shining bright upon the Water, sometimes the upper part of the Waves appears Purplish, sometimes Reddish; though in Shallows perchance it may receive this latter Tincture also from the Sands which lie under it. When the Wind has freshned, and the Ship has been under full Sail, I have observed the Waves to the head, and at the sides of the Ship, to appear with a pale kind of brightness: and at *Malaga*, and at my return, going on board our Ship, which lay about half a League from the shore, at Night, the Wind then at East, the Boats Crew letting their Oar fall roughly into the Water, diverted us as it were with the sight of a continued Flame, raised by their rowing; which I ascribe rather to the Saline Particles of the Sea-Water, which were then put into a violent Agitation, than to the Spawn of Fish, as some of our Company imagined.

Sailing toward the West of *Portland*, we saw several *Porpisces* playing with their Heads above Water; which I mention only, because the Seamen look upon them as fore-runners of a Storm; the Wind soon after

after blowing very hard at North by East. And afterwards arriving at *Constantinople*, the Wind blowing a stiff Gale at North, I observed with a pleasing kind of astonishment good part of the *Propontis*, that is, from the *Seraglio Point* toward the Islands, which lye against the *Bay of Nicomedia*, Eastward and South-East from us, as far as we could see, covered as it were with *Porpisces*, which appeared every where in great abundance. So that I am very apt to believe that *Julius Solinus* in *Chap.* 12. of his *Polykister* is to be understood of *Porpisces*, and not of *Dolphins*, now properly so called, though that be his Word, speaking of the *Bosphorus* and *Propontis: Hæc profunda Delphinas plurimos habent:* and soon after, *ante omnia nihil velocius habent maria, sic ut plerunque transvolent vela navium.* I could not hear that any *Dolphins* are caught in those Seas by the *Greeks*, whose Poverty, added to the love which their Nation has for Fish, and the advantage arising thence, upon the account of their solemn Fasts and Abstinences from all Flesh, even to a wonderful strictness and scrupulosity, has made them excellent Fishermen: nor did I ever see any in their Fish-Markets, or see one of them brought to the Ambassador's Table by the Providetor for curiosity: Though otherwise it is an excellently well tasted Fish, especially when soused. I allow, that they will swim very swiftly, as do the *Porpisces*; and that they will follow a Ship for several Leagues together: but then they Swim somewhat deep

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in the Water, sometimes are catch'd, though not often. The Seamen have reached them with a Fisgig, a kind of barbed Iron, at the End of a Pole tyed fast to a Rope, and have made good Chear with them. But this is only my Conjecture, with which I end my Journal.

Deo Servatori Laus.

Histo-

Historical Observations relating to Constantinople. *By the Reverend and Learned* Tho. Smith, *D. D. Fellow of* Magd. Coll. Oxon. *and of the* Royal Society.

CONstantinople, formerly *Byzantium*, was [a] by *Constantine* the Great, called so after his own Name, who being mightily pleased with the beautiful and advantagious situation of the Place between two Seas, and defended by narrow Streights on both sides, removed the Seat of the Empire hither, and laid the foundation of its future Splendor and Greatness. It was also by a [b] special Edict or Law of the same Emperor, which he caused to be engraven on a Marble Pillar, placed near his own Statue on Horseback, in one of the Piazza's of his new built City called *Strategium*, where the Soldiers u-

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a Κατὰ τ ἐπώνυμον ἡμῖν πόλιν. *So the Emperor* Constantine *in a Letter to* Eusebius. de vita Constantini. *lib.* 4. *cap.* 36. & apud Theodoritum Histor. Eccles. *lib.* 1. *cap.* 16. *v.* etiam Socrat. Scholast. Hist. Eccles. *lib.* 1. *cap.* 16.

b V. Socratem ibidem. Et Theophanem in Chronographia XXV. anno Constantini.

sed

used to Muster, as in the *Campus Martius*, called *second or new Rome*, in emulation of old *Rome*, which he designed and endeavoured this should equal in all things. Accordingly he endowed it with the same Priviledges and Immunities, and established the same number of Magistrates and Orders of People, and divided the whole extent of it into fourteen Precincts or c Regigions, according to the division of *Rome*. And the *Greek* Writers were as elegant and extravagant in their commendations of it; but the usual Title in their ordinary Discourses and Writings, when they had occasion to mention it without any flourish, was ἡ βασιλεύουσα, ἡ βασιλὶς, that is, the Imperial City, to the same sense with that of d *Sidonius Apollinaris*,

Salve sceptrorum columen, Regina orientis,
Orbis Roma tui.

The Country about it was afterwards called *Romania* in a limited and restrained sense, (for that *Romania* was anciently the same with *orbis Romanus*, seems clear from e *Epiphanius*) and the People Ῥωμαῖοι. But I suppose

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c *The* Italian *Word* Rione *is a manifest corruption of the* Latin *Word.*

d In Panegyrico, quem Romæ dixit Anthemio Augusto, bis Consuli.

e Hæresi LXIX. quæ est Arianorum. Sect. 2. *where he says a sad dismal Fire was kindled by* Arius; πῦρ ἀ τὸ τυχὸν ὁ κατέληφ πᾶς ἣ Ῥωμανίαν ἀεδὸν, μάλισα ἣ ἀνατολῖς τὰ μέρη, *which seized almost upon all* Romania, *or* Universum Romanorum imperium, *as* Petavius *renders it, but especially the Eastern parts of it.*

this was not done till about the middle times of the Empire, when it began to decline. The *Greeks* still retain this Name. For if you ask any of the *Greeks* born upon the Continent of *Thrace*, what Country Man he is? he answers forthwith, Ρωμαῖος *Romios*, for so they pronounce it. The *Turks* in like manner call a *Greek* Christian *Urum Gaour*, or the Roman Infidel, as they will call sometimes the Emperor of *Germany*, *Urumler Padisha* or Emperor of the *Romans*. Hence it was, that the latter *Grecian* Emperors stiled themselves βασιλεῦς Ρωμαίων, Kings of the Romans, that is, such as were Born in *Romania* and the other Countries, which made up the Eastern division of the Empire. Tho' perchance by this flourishing Title they pretended a right to the Governmenment of the West: Upon which vain presumption they assumed also the Title of Κοσμοκράτορες, or Emperors of the World, as if they had been the true Successors of *Augustus*, and the Western Emperors, Usurpers, whom they called by way of contempt and indignation, Ρῆγες, Reges, as [f] *Luitprandus* informs us in the accompt of his Ambassy to *Nicephorus Phocas*, and afforded the People of *Italy* no other Title than that of [g] *Longobards* or *Lombards*. The present *Greeks* call all the Western Christians Λατῖνοι or φράγγοι *Latins* or *Franks*, the *Turks* only making use of the latter, when they speak civilly of us, and calling *Christendom Phrenkistan*, in the present *Greek* φραγγία. The *Turks* now as proudly call *Constantinople Alem pena*, or the refuge of the

[f] Pag. 144, 152, 153. [g] Pag. 139.

World.

World: Where indeed seems to be a medly of all or most Nations of three parts of it, and of all Religions, which are allowed to be publickly profest and exercised every where throughout the Empire, except the *Persian*. For they look upon it as a corruption of, and deviation from the Rules and Doctrine of *Mahomet*, their great false Prophet, and therefore absolutely forbid it, as repugnant to, and destructive of the Doctrine of Life and Salvation, as they speak. And accordingly they condemn with all imaginable fury the Professors of it, who pretend to follow *Ali*, as Sectaries and Apostates, and entertain worse Opinions of them, than of *Christians*, or *Jews* or *Infidels*. The *Persians* are not behind-hand with them in their hatred and disrespect, deriding them as gross and stupid, and looking upon them as little less than barbarous; Interest and Zeal for their several Tenets heightning their differences so much, that in time of War they destroy one anothers *Moschs*. I remember, that there was a great Discourse in *Constantinople* among the *Turks* concerning an impudent hot-headed *Persian*, who publickly in the new *Mosch* built by the Mother of the present Emperor, asserted that *Ali* was equal to *Mahomet* But it seems he very luckily made his escape out of their Hands, at which the Priests and the more zealous *Turks* were very much scandalized.

The *Greeks* have twenty six Churches within the Walls of the City, besides 6 in *Galata*, of which I have given an Account elsewhere. They have also two Churches at *Scutari*, one

at *Kadikui* or *Chalcedon*. So at *Stauroſis*, *Chingilkui*, and ſeveral other Villages upon the Aſian Shore off the Boſphorus, as at *Beſhictaſh*, *Ortakui*, *Chorouch cheſme*, which Church is dedicated to St. *Michal* the Archangel, *Jenikui* or *Neochorion*, *Therapia*, *Bujukdere*, and other Villages on the *European* ſide. They have alſo a Church at *Haskui*, where is their Burying place, and another near the *Bagnio*, dedicated to St. *Paraſceve*. And at *Tatoula* about a Mile from *Pera*, upon a Hill, which from the Name of the Church is thence called by the *Greeks* and *Franks*, St. *Demetrius* his Hill. Next to the holy Virgin, St. *Demetrius* and St. *George* have moſt Churches dedicated to them.

The *Armenians* have not, if I remember aright, above ſeven Churches; they being few in number in compariſon of the *Greeks*.

The *Jews* may have in the City and places adjacent between twenty and thirty Synagogues, this being the greateſt ſhelter of that accurſed and contemptible People in the Grand Signiors Dominions, next to *Caire* and *Saloniki*: and I believe there may be about twenty or thirty thouſand families of them. They are of great uſe and ſervice to the *Turks*, upon accompt of their Brocage and Merchandiſe, and Induſtry in ſeveral mechanical Trades. All theſe I look upon as Natives, or Slaves rather, each paying mony for his Head every year. The *Jews* indeed very wiſely collect this Tax among themſelves, and according to an agreement made with the *Teſtardar* or Treaſurer, pay a certain ſum in groſs for their whole Nation reſiding there: by which piece

of

of cunning they are great gainers, and ſpare the poor among them leſs able to pay, by a contribution of the rich to make up the ſum. The *Engliſh* and *Dutch* Ambaſſadors have their Chappels in their Palaces common to their reſpective Nations.

The Churches and Chappels of the Weſtern *Chriſtians* of the *Roman* Communion in *Galata*, are

St. *Peters*, belonging to the *Dominicans*, where is the famous piece of *Madonna di Conſtantinopolis* as the *Italians* call it, or of the bleſſed Virgin, holding the holy Child *Jeſus* in her arms: which they pretend to be drawn by the hand of St. *Luke*, celebrated by ſome of the latter Eccleſiaſtical Writers to have been a famous Painter. Out of reſpect to this idle tradition the credulous and ſuperſtitious *Latins* and *Greeks* of the *Roman* Communion ſhew great veneration to it, which otherwiſe hath little in it of proportion, art, or beauty, to derive any reputation upon the deſigner, or upon his work.

St. *Francis*, belonging to the *Conventuali*, Fryars of the order of St. *Francis*; the ground of this by the wiſe conduct and interceſſion of *Caviliere Molino*, the Venetian *Bailo*, after the ſurrender of *Candia*, upon the Peace made by the Republick with the Grand Signior, was procured to be reſtored, and a handſome Church rebuilt with the large contributions of mony ſent out of *Chriſtendom*.

St. *Benedict*, belonging to the *Jeſuits*, where is a rich Altar curiouſly adorn'd with ſeveral figures in *Moſiack*. This Convent was purchaſed for them by their great Benefactor, *Henry* the fourth of *France*.

St. *Mary*, belonging to the *Observantines* or *Zoccolanti*, a branch of the order of St. *Francis*, so called from their going in *Zoccoli* or wooden clogs.

The *Capuchines* have a little Chappel dedicated to St. *George*, hard by the *French* Ambassadors Palace.

St. *Ann*, a Chappel frequented by the *Perotes*

St. *Paul* and St. *Anthony*, were both taken away some years since from the *Christians*, and turned into *Moschs*. The former of which is now known by the name of *Arab Giamesi*, or the Mosch of the *Arabians*. Our Interpreters mentioned also to me the Church of St. *John*, which the *Turks* have seized upon for their use, St. *George*, which the *Jews* are possest of, and St. *Sebastian*, which was used to be visited chiefly on Holy days.

The North-wind blows for the most part at *Constantinople*. Which must be ascribed to its nearness to the *Euxine* Sea, which bears that point from it. So that for want of a Southwardly wind Ships have been forced to lye a month or two sometimes near the mouth of the *Hellespont*. This was taken notice of long since by *Eunapius* in the life of *Ædesius*, who ascribes the seldom blowing of the *South* wind to the situation of the mountains, whereas it is checked and overpowered by the exuberance of the Vapours continually sent forth from the *black* and *great Sea*, as the *Greeks* call it in comparison of the *Mediterranean*. *Vide ad finem Codini de origin. Constantinopol. Edit. Paris. pag.* 80.

The *Hellespont* is about forty miles in length, and

and at the Caſtles of *Seſtos* and *Abydos* the ſtreight may be about three quarters of an Engliſh mile over, or leſs.

The length of the *Propontis* is about a hundred and fifty miles, both ſhores may be ſeen in the middle of it. In it are,

Cyzicus, an Iſland near the *Aſian* ſhore, to which it is joined by two bridges. It ſtill retains its ancient name Κυζικὸ, and is the ſeat of a Biſhop, being inhabited by a conſiderable number of *Greeks*.

Proconneſus, not far from the former; now, as for ſome centuries paſt, called *Marmora*, from the excellent quarries of Marble there found, the marmor *Cyzenicum* alſo being famous in the time of *Pliny*.

Besbychus, now called by the *Greek* καλόλιμνο, or the good haven, not far from the entrance into the bay of *Montanea* to the North and by Eaſt. The *Turks* call it *Imralme*.

There are ſeveral Iſlands over againſt the bay of *Nicomedia*, formerly called *Sinus Aſtacenus*, according to *Strabo*, about ſix or ſeven leagues from *Conſtantinople*. g

Prote, ſo called becauſe they approach firſt to it, coming from *Conſtantinople*; to the South of this *Prencipe* and *Pytis*, which I take to be the ſame with *Pyrgos*, that lyes inmoſt toward the bay: *Chalcitis*, in modern Greek, *Chalce* or *Chalcis*. *Oxia* and *Platy* to the North-weſt. I have expreſſed the *Turkiſh* names of the leſſer and uninhabited Iſlands elſewhere, which perchance were phantaſtically impoſed by ſome *Franks*.

The *Seraglio* is at the extreme point of the North-eaſt Angle of *Conſtantinople*, where

g. v. Gillium de Boſp. Thracio lib. III. cap. 12. &c.

formerly stood old *Byzantium*, within which towards the Haven is a stately *Kiosk* or summer house, from whence the *Grand Signior* usually takes Barge, when he passes into *Asia*, or diverts himself upon the *Bosphorus*, at which time the *Bostangi Bashi*, who hath the principal care of the Emperors palace, and hath the command of the *Bosphorus*, sits at the helm and steers.

The seven Towers are at the South-east extremity.

The only Suburbs are to the North-west, along the Haven-side; for above the hill, where the three walls begin, lies an open champaign Country, except that here and there at considerable distances farm houses are scatter'd.

The Haven runs in from the West, and so opens East.

At the East end of *Galata* is *Tophana*, where they cast their great Guns.

Pera and *Galata* have about six gates to the Seaward. The whole tract of ground was anciently, before the times of the Emperor *Valentinian*, who encloſed and fortified *Galata* with walls and towers, styled Περαῖα or Regio *Peræa* being πέραν τ πόλεως, on the other side of the City to the North, which is the reason of its name, seated on higher hills, and whose ascent is more steep and difficult.

Our modern *Geographers*, such as *Mercator* and *Ortelius*, who herein follow *Ptolomy*, place *Constantinople* in the Latitude of 43. degrees and 5 minutes: the *Arabian* and *Persian Astronomers*, as *Abulfeda*, *Nassir Edin*, *Vlugh Beigh*, and so the πεῤχειροι κανόνες, *Chrysococcas* transla-

ted

ted out of the *Persian* tables, place it more Northerly in 45. But by latter and better observation it is found, that they have erred in assigning the Latitude of this City, as of several other places. To salve these differences, there is no just ground of pretence to say, that the *Poles* are moveable and have changed their situation since their time, whereas it may better be imputed to their want of due care, or to their taking things upon trust, from the reports of *Travellers* and *Seamen*, not having been upon the places themselves: which certainly is to be said for *Ptolomy* whose observations, as to places more remote from *Alexandria*, are far from being accurate and true. The learned Mr. *John Greaves*, as I find in a Manuscript discourse, very worthy of being Printed, which he presented to the most reverend and renowned *Arch-bishop Usher*, took the height of the *Pole* at *Constantinople* with a brass sextant of above 4 feet *radius*, and found it to be but 41 degrees 6′. but by the observation we made in our Court-yard at *Pera* with a very good *Quadrant* we found it but 40 degrees and 58 minutes of North Latitude.

There is no place between the *Propontis* and the walls of the City, except just at the Seraglio-point, which may be two hundred paces in length; where they have raised on a platform a battery for Great guns; but from the point to the end of the Haven West, the space to the gates is unequal in some places about twenty paces broad, in others three or four times as many more.

The distance between *Constantinople* and *Chalcedon*

cedon upon the opposite *Bythinian*-shore may be about three or four miles.

In the Walls are engraven the Names of several Emperors, who reigned toward the declension of the *Grecian* Empire, as *Theophilus*, *Michael*, *Basilius*, *Constantius Porphyrogenitus*, by whose care, and at whose expence the several breaches caused in them by the Sea or by Earth-quakes, were repaired.

Kumkapi or the sand-gate lies toward the *Propontis*; this the *Greeks* call in their vulgar language Κονδοσκάλι, *Contoscalium*, or the little scale or landing-place. Here formerly was an Arsenal for Gallies and other small vessels; it being a convenient passage over Sea. Over this Gate was anciently engraven a curious Inscription still preserved in that excellent collection published by [h] *Gruterus*.

Jedicula Kapi, or the Gate of the seven Towers, so called from its nearness to that *Acropolis*, is that, I guess, which the *Greeks* formerly called χρυσῆ or the Golden Gate, and by some late *Latin* Writers *Chrysea*, in *Luitprandus*, *Carea*, by a mistake either of the Transcriber or Printer, for *Aurea*, for so certainly it must be mended. Over this Gate was this inscription,

Hæc loca Theudosius decorat post fata Tyranni,
Aurea secla gerit, qui portam construit auro.

cited by *Sirmond* in his notes upon [i] *Sidonius*. This Gate is in the twelfth Region, and was

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[h] Pag. 169. Num. 3. [i] Pag. 121.

also

also called ὡραία from its beautiful and curious structure.

The Gun gate formerly called Roman gate, not because it leads towards the continent of *Romania* or *Thrace*, but from [k] St. *Romanus*, where the last Christian Emperor was killed at the assault which the *Turks* made to force their Way into the City by it.

Near *Adrianople* gate is a fair large *Mosch* called *Ali-bassa*, upon a hill accounted the highest in the City.

The distance between tower and tower in the upper wall to the landward may be about ninety of my paces; the space between that and the second wall about eighteen paces over.

The place, where the *Lyons*, *Leopards*, and such like wild creatures are kept, (where I saw also several *Jackalls*) was formerly, as the *Greeks* told me, a Christian Church dedicated to Παναγία or the Blessed Virgin, where this Verse is still legible,

Κατὰ Σκυθῶν ἔπνευσας θερμὸν ἐν μάχαις.

There is no tide or running back of the water on any side of the *Bosphorus* into the black Sea, as [l] some have imagined, whose mistake might possibly arise hence, that the wind being at North, and blowing hard, the current sets more violently at such times against the several headlands jetting out into the channel, which admits of several turnings, and

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k Vid. Historiam Politicam Constantinopoleos apud Crusium in Turco-Græcia, pag. 9.

l This was an old error; for thus writes Dionysius Byzantinus in his little Book of the Bosphorus. Τὸ ῥεῦμα τὸ μὲν πλεῖον κατιόντος ἐστὶν ὃ ὅτε κατ' ἐπιπνοίαν ἀναφέρονται.

so

so the waters are forced back to some little distance: or else because when the South-wind freshens and grows boisterous, it makes a high rolling Sea in the *Propontis* and *Bosphorous*, and being contrary to the current, gives a check to it, so that it becomes less sensible, and is easily stemmed. Where it is narrowest, the distance seems to the eye to be scarce a mile over from one shore to another; where broadest, not much above a mile and a half, unless where it runs into the deep Bays, which by reason of their shallowness only harbour Boats.

The channel certainly is natural and not cut by art, as some have idly fansied, not considering, how the *Euxine* Sea should discharge it self otherwise of those great quantities of waters, poured into it by the *Ister* and *Tanais*, now called *Don*, and the other Rivers, whereby it becomes less salt, even very sensibly to the tast, than several parts of the *Mediterranean*.

The Fish, by a strange kind of instinct, pass in vast shoals twice a year, Autumn and Spring, through the *Bosphorus*, that is, out of one Sea into another; of which the *Greeks*, who live several months of the year upon them, take great numbers, and supply the markets at easie rates; the Cormorants and other ravenous water-fowl, which the *Turks* will not suffer to be destroy'd or otherwise molested, preying upon them.

The weather in some months is very inconstant, great heats and colds happening the same day upon the change of the wind.

The winters at *Constantinople* are sometimes extraordinary severe. I have heard it related by several old *Greeks*, as a thing most certain

that

that the *Boſphorus* was frozen over in the time of *Achmed*, and that a Hare was courſed over it. It hapned thus, that upon a thaw huge cakes of Ice came floating down the *Danube* into the black Sea, and were driven by the current into the *Boſphorus*, where upon the return of the froſt, they were fixed ſo hard that it became paſſable. In the year 1669 there was Ice in the Haven to the great amazement of the *Turks*; and ſome were ſo frighted at this unuſual accident, that they look't upon it as a diſmal prodigy, and concluded, that the World would be at an end that Year. The *Aguglia* or *Obelisk* in the *Hippodrome* is betwixt fifty and ſixty Foot high.

The Hiſtorical Pillar in *baſſo relievo*, raiſed in honour of the Emperors *Arcadius* and *Honorius*, may be in height about an hundred ſeven and forty feet.

Alexius Comnenus lies buried in the Patriarchal Church againſt the wall, and his daughter *Anna Comnena*, the Hiſtorian, who lived about the year of Chriſt 1117. They pretend to ſhew there the reliques of St. *Anaſtaſia*, who ſuffered Martyrdom under the Emperor *Valerianus*, and of St. *Euphemia*, Virgin and Martyr, who loſt her life moſt glorioufly for *Chriſt's* holy religion at *Chalcedon* unde *Diocleſian*.

In *Sancta Sophia* there are pillars ſo great, that a Man can ſcarce fathom them at twice. At the end of the Gallery, that joins the other two, each about thirty of my paces wide, there is a piece of tranſparent Marble, two or three Inches thick. In the North gallery upon the Pavement is a reddiſh ſort of a Marble

ble Stone, brought, as the *Turks* and *Christians* relate, from *Palestine*, on which they Fable, that the blessed Virgin used to wash the linnen of our Saviour.

I observed but one step from the Body of the Church to the *Bema* or place where the Altar formerly stood.

The great *Mosch* at *Chasim-bassa* on *Pera* side to the West, was formerly a Church dedicated to St *Theodosia*.

Gianghir, a Mosch so called, upon a hill at *Fondaclee* near *Tophana*.

In *Constantinople* there are several narrow streets of Trade, closed up with sheds and pent-houses, which I suppose were in use before the *Greeks* lost their Empire, and are the same with the σκεπασοὶ καὶ φραχτοὶ δρόμοι in *Chrysaloras* his[m] Epistle. But besides these places, several Trades have their distant quarters. The streets are raised for the most part on each side for the greater convenience.

[m] Pag. 119.

Not far from *Suleimania* is the house of the *Aga* or General of the *Janizaries*, which so often changes its Masters.

Pompey's pillar, as the *Franks* erroneously call it, is of the *Corinthian* order, curiously wrought, about eighteen foot in height and three in Diameter.

Beshiktash, a Village within three or four miles of *Constantinople* towards the *Bosphorus*, where lies buried the famous Pyrate *Ariadin*, whom the *Christian* Writers call *Barbarossa*, who built here a handsome Mosch, having two rows of Pillars at the entrance. The Captain *Bassa* usually, before he puts to Sea with

with his Armata of Gallies, visits the Tomb of this fortunate Robber, who had made several thousand *Christians* Slaves, and makes his Prayers at the neighbouring Church for the good Success of his expedition.

They reckon in the City above a hundred publick Baths, every street almost affording one. They are esteemed works of great Piety and Charity; there being a continual use of them, not only upon the accompt of Religion, but of Health and Cleanliness. For their Dyet being for the most part hot spiced meats in the Winter, and crude fruits in the Summer, their Liquor Fountain Water, or Coffee, to which we may add their lazy kind of Life (for walking is never used by them for digestion, or otherwise in the way of diversion) frequent bathing becomes necessary.

There are several receptacles of Water under Ground, and one particularly under the Church of *Sancta Sophia*, as I was informed; but I did not think it worth my curiosity to descend into it. These were of great use to the poor *Greeks* in the last fatal Siege; but the *Turks* are so secure, that they do not think, that they deserve either cost or pains to keep the Waters sweet, or the cisterns in repair.

The *Aqueducts*, which answer to those glorious *Aqueducts*, near *Pyrgos*, and convey the water to the great cistern near Sultan *Selim*'s Mosch, are in that part of *Constantinople*, which lies between the Mosch of *Mahomet* the Great and *Shaxade*.

The *Turks* began to besiege *Constantinople* on the fifth of *April*, and took it the twenty ninth of *May* on *Whitsun Tuesday* morning 1453. or as the *Turks* reckon in the year 857. of the

Hegira

Hegira, or flight of *Mahomet*, the 22 day of the firſt *Jomad*.

The Chappel, where *Ejub Sultan* is interred, at whoſe Head and Feet I obſerved great wax Candles, is encloſed with latten wire Grates, for the better accommodation of ſuch religious *Turks* as come to pay their reſpect to the memory of this great *Muſulman* Saint. In the middle of the Area there is raiſed a building ſuſtained by excellent marble Pillars, aſcended by two ſeveral pair of ſtairs, where the new Emperor is inaugurated, and where he uſually goes in *Biram*-time.

An account of the City of Prusa *in* Bythynia, *and a continuation of the Historical Observations relating to* Constantinople, *by the Reverend and learned* Thomas Smith *D. D. fellow of* Magd. Coll. Oxon. *and of the* Royal Society.

Montanea formerly called *Nicopolis* according to *Bellonius*, or rather *Cios*, the bay hence called *Sinus Cianus*, lies in the bottom of a Bay about Fourscore miles from *Constantinople*, and is the Scale or Landing-place for *Prusa*, from which it may be about twelve miles; in the middle way to which is the Village *Moussanpoula*.

Prusa, now called by the *Turks Bursia*, the chief City of *Bithynia*, is seated at the foot partly, and partly upon the rising of the mount *Olympus*, which is one of the highest Hills of the lesser *Asia*. Its top is covered with Snow for nine or ten Months of the Year, several streams of Water flowing down the Hill continually, accounted very unwholesome from the Snow mixed with it. In the upper part of the City to the Northwest lies the Seraglio, which is walled round; but the Emperors not

reſiding here ſince their acqueiſts in *Thrace*, or ſcarce making viſits to this Imperial City, and none of their Sons living here of late, according to the former Policy of the *Turkiſh* Emperors, who did not permit their Sons, when grown up, to be near them, but ſent them to ſome Honourable Employment, accompanied with a Baſſa and Cadi to inſtruct them in the Arts of War and Government, it lies now neglected and diſpoiled of all its ornaments.

In this part alſo are the Sepulchers of *Oſman*, the founder of the Family, which now Reigns, and his Son *Urchan*, who took the City, near a Moſch, formerly a *Chriſtian* Church dedicated to St. *John*, and where was formerly a Convent of Religious, built by *Conſtantinus Iconomachus*, where I ſaw the figure of a Croſs ſtill remaining upon the Wall. Here hangs up a Drum of a vaſt bigneſs, ſuch as they carry upon the backs of Cammels, and I ſuppoſe is one of thoſe which they uſed in the taking the Place.

In the lower part, near the bottom of the Hill, *Morad* the ſecond, the Father of *Mahomet* the Great, lies buried: near whereunto was formerly the Metropolitical Church of the *Holy Apoſtles*. The *Bezeſten*, or Exchange, ſeems to be much better and larger than the great one at *Conſtantinople*, as are the ſeveral Caravanſerais built for the uſe and accomodation of Merchants, and Travellers; in one of which, the Rice Chane, I took up my quarters.

Without the City toward the Eaſt is the Moſch and Sepulcher of the Emperor *Bajazid* the

the first, whom the *Turks* call *Jilderim* or lightning, and the Greek Writers λαίλαψ. Not far from hence is the Mosch of *Mahomet* the first, and his Sepulcher. Toward the West upon the side of the Hill is the Mosch of *Morad* the First, whom they call *Gazi* or the Conqueror, near which he lies buried. There are in the whole about 124 Moschs, several of which were formerly *Christian* Churches, and between fifty and sixty Chanes. The Castles built by *Osman*, when he besieged the City, are slighted and altogether unfortified, the one to the North, the other to the South-West.

At *Checkerghe*, about a mile and a half out of Town, are the hot Baths, much frequented both by *Christians* and *Turks*. They are made very Convenient to Bath in, and are covered over, that they may be used in all Weathers. Among others, there is a large round *Basin*, where they usually divert themselves by Swimming.

What opinions the *Turks* have of our Blessed *Saviour* and the *Christian* Religion, I shall briefly shew, as they lie dispersed in several Chapters of the *Alcoran*, according to which they frame their Discourse, whensoever either Zeal or Curiosity puts them upon this Topick. For *Mahomet* upon his setting up to be the Author of a new Religion, finding such a considerable part of the World professing the doctrine of *Christ*, with all the Mysteries of Faith therein contained, was cast upon a necessity of saying something both concerning Him and It. By which it will appear, how great the Power of Truth is above Imposture

and Subtility, and that as the Devils in the Possessed confess'd, though against their Wills, *Christ* to be the Son of *God*, so this *Dæmoniack* in the midst of all his Forgeries and Lies, and Ridiculous and Childish Narratives, not being able to contradict the universal Belief of the *Christians* of that, and the preceding Ages, founded on the History of the Gospel, hath been forced to give Testimony to several particulars of it.

They confess then that *Christ* was Born of a Pure Spotless Virgin, the Virgin *Mary*, chosen by *God* and sanctifyed above all the Women in the World; and that the Angel *Gabriel* was dispatched out of Heaven to acquaint her with the News of it. That such a kind of Miraculous and Supernatural Birth never hapned to any besides, and that *Christ* was conceived by the *Holy Ghost*, and that he wrought mighty Miracles, for Instance, that he cleansed Lepers, gave Sight to the Blind, restored Sick Persons to their Health, and raised the Dead.

That he is a great Prophet, sent by *God* to convert Men from the Vanity and Error of their false Worship to the Knowledge of the true *God*, to Preach Righteousness, and to correct and restore the Imperfection and Miscarriages of Humane Nature; that he was of a most Holy and Exemplary Life, that he was the true Word of *God*, the *Apostle* or *Ambassador* of *God*; That his Gospel was revealed to him from Heaven, and that he is in Heaven standing nigh to the Throne of *God*. They Blaspheme indeed with a Brutishness and Stupidity only befitting *Turks*, the My-

Mysteries of the *Holy Trinity*, and of the Divinity of our *Blessed Saviour*, and deny that he was put to Death, and say that another in his Shape was Crucified by the *Jews*, and that he himself was assumed into Heaven in his Body without dying at all, and consequently they will not own, that he satisfyed Divine Justice for the Sins of the World; so great an affinity is there between the Heresie of *Socinus* and profess'd *Mahometanism.*

I could never yet see any *Turkish* Translation of the *Alcoran*; they cry up the Elegance of the Style, which being Enthusiastick and High-flown, by reason also of the tinckling of the Periods, is very delightful to their Ears, who seem to be affected with Rhime mightily. Though I suppose it is upon a more Politick Account, that they are so averse, as to the translating it into their vulgar Language, not out of respect to the Sacredness of the Original only, whose full commanding Expressions they think cannot be translated without a great diminution to the Sense; but to keep it in greater Veneration among the People, who might be apt to Slight and Disesteem it, should it become thus common among them. It is enough, that the Priests and Learned Men explain the difficult Passages of it to the People, and write Commentaries for the use of the more Curious and Inquisitive. The *Persians* on the contrary think it no disparagement to the *Arabick*, or Profanation of the Sense, to Translate this cursed Book into their own Language, and Copies are frequent among them.

The *Grand Signior*'s Women are uſually the choiceſt Beauties of the Chriſtian Spoils, preſented by the *Baſſa's* or *Tartars*. The preſent *Sultana*, the Mother of the young Prince *Muſtapha*, is a Candiot; the *Valide* or Emperor's Mother, a *Ruſſian*, the Daughter of a poor Prieſt, who with her Relations were ſeized upon by the *Tartars* in an Incurſion, which they made into the *Muſcovites* Country. She being receiv'd into the *Seraglio*, by her beautiful Complexion and cunning Behaviour, gain'd the Heart and Affection of *Sultan Ibrahim* (a Man wholly addicted to ſoft Pleaſures, and who ſeldom cared to be long abſent from the Womens Apartment, but choſe to ſpend his time among them) having the good fortune to be the Mother of the Prince *Mahomet*, the eldeſt Son of his Father, who now Reigns, ſhe had all the Honours that could poſſibly be done her, and was the beloved *Hazaki* or chief Concubine. During this height of Splendor and Glory, the Court removing from *Conſtantinople* to *Adrianople*, diſtant about an Hundred and Twenty Miles, as ſhe was paſſing in great State attended with her Guards, through the Streets of the City, in a Coach, much like our Carriage-Wagons, but that they are latticed to let in the Air (for no one muſt preſume to ſtare or ſcarce look upon the Women, much leſs muſt they themſelves ſuffer their Faces to be ſeen in this jealous County) ſhe out of Curioſity looking through the holes, ſaw a poor *Chriſtian* Slave in a Shop, where Sugar and ſuch like Wares were Sold. Upon her return ſhe ſent one of her Eunuchs to enquire for

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the Person, and to ask him several Questions about his Country, Relations, Friends, and the time when and how long he had been a Slave: His answers were so particular and satisfactory, that she was soon convinc'd of the Truth and Certainty of her apprehensions, when she first cast her Eyes upon him, that he was her Brother, and accordingly it proved so. Whereupon acquainting the Emperor with it, she immediately redeemed him from his Patron, and having made the poor Wretch turn *Turk*, got him considerably preferred.

The Bassa's for the most part are the Sons of *Christians*, taken into the *Seraglio*, near the Emperor's Person, and so are prefer'd to considerable Governments, or else they raise themselves by their Conduct and Valour. *Mahomet* Bassa in the time of *Achmet*, whose eldest Daughter he Married, was the first natural *Turk*, that was made chief Vizir, having before been Captain Bassa. The chief Vizir *Mahomet Kupriuli*, (who settled the Empire in the Minority of this Emperor, when it was ready to be shaken into Pieces, and dissolved by several powerful Factions in the State, and by the Mutinies and Discontents of the *Janizaries* and *Saphi's*, who drove different ways) was an *Albaneze* by Birth, the Son of a *Greek* Priest, whom out of the height of Zeal for *Mahomet*, he made turn *Turk* in his Old Age, and converted the *Christian* Church in the Village where he was Born into a Mosch. This Man also forbad the *Dervises* to Dance in a Ring and turn round, which before was their solemn Pra-

ctice at set times before the People, which they would do so long, till they were giddy by this swift circular Motion, and fell down in a Swound, and then oftentimes upon their recovery from such Trances, they pretended to Revelation. The Church-Men are not very kind to his Memory, looking upon him as a Man of little or no Religion; and they give out, that if he had lived, he would have forbid their calling to Prayers from the Spires of their Moschs, and hanging out Lamps; both which they look upon as Solemn and Essential to the exercise of Religion; but he as the effect of Biggotry and Superstition.

They have a mighty Honour and Esteem for Physicians, for though they are of Opinion, that they cannot with all their Art prolong Life, the Period and Term of it being Fatal, and absolutely determin'd by God, yet they often consult them upon any violent Sickness or Pain, in order to make the time allotted them in this World more pleasant and easie. It is extraordinary rare, that a natural *Turk* makes Physick his Profession and Study. They who practice it among them, when I was in *Turky*, were for the most part *Greeks* and *Jews*, who know nothing of Chymical Medicines, but follow the usual Methods, which they learnt in *Italy* and *Spain*, the former having studied in *Padua*, and the latter in *Salamanca*, where they pass for good *Catholicks*. And I remember I met with a certain *Jew* Physician, who had been a Capuchine in *Portugal*. During the tedious Siege of *Candia*, the *Vizir*, what with the me-

melancholy, and what with the ill Air of the Camp, finding himſelf much indiſpos'd, ſent for a *Chriſtian* Phyſician *Signior Maſſalins*, a ſubject of the Republick of *Venice*, but Married to a *Greek* Woman, by whom he had ſeveral Children, who was our Neighbour at *Pera*, an experienc'd able Man, to come ſpeedily to him, and made him a Preſent of about a thouſand Dollars, in order to fit himſelf for the Voyage and bear the expence of it. By this worthy Gentleman's Care, he recovered his Health, and would not permit him to depart, till after the ſurrendry of that City, which might be about ſeven Months after his Arrival there, treating him in the mean while with all imaginable Reſpect. During our ſhort ſtay at *Burſia*, one of our *Janizaries* accidentally diſcourſing with a *Turk* about us, whom they knew to be *Franks*, told him that there was a Phyſician in the Company, who had been lately at the Grand *Signior*'s Court at *Saloniki* with the *Engliſh* Ambaſſador, and was now upon his return from *Conſtantinople* to *Smyrna*, where he lived. This preſently took vent, and the *Turks* thought that they had got a Man among them, that could Cure all Diſeaſes Infallibly; for ſeveral immediately came to find us out in behalf of themſelves or their Sick Friends, and one of the moſt conſiderable Men upon the Place, deſir'd the Doctor to go to his Houſe to viſit one of his Women Sick in Bed, who being permitted to feel her naked Pulſe (for uſually they throw a piece of fine Silk or Curl over their Womens Wriſts at ſuch times) ſoon diſcovered by that and other Symptoms and

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Indications of her Distemper, that opening a Vein would presently give her Ease and recover her: which he did accordingly; for which he received an embroidered Handkerchief instead of a Fee, and gained the Reputation of having done a mighty Cure.

They have little of Ingenious or Solid Learning among them; their chief Study, next to the *Alcoran*, being metaphysical Niceties about the Attributes of *God*, or else the Maintenance of other odd speculative Notions and Tenets, derived down to them from some of their famed Masters and Holy Men, whom they pretend to follow. Their Knowledge of the motion of the Heavens, for which the *Arabians* and the other Eastern Nations have been so deservedly famous, as their Astronomical Tables of the Longitude and Latitude of the fixed Stars, and of the appulse of the Moon to them, fully evince, is now very mean, and is chiefly studyed for the use of Judiciary Astrology. The great Instrument they make use of is an Astrolable, with which they make very imperfect Observations, having no such thing as a Quadrant or Sextant, much less a Telescope, or any mechanical Engine, to direct and assist them in their Calculation. Their Skill in *Geography* is as inconsiderable; I remember I heard the Captain Bassa, whom they stile Admiral of the Black and White Seas, meaning the *Euxine* and the *Mediterranean*, ask this silly Question; whether *England* were out of the Streights? and at another time the *Caymican* or Governour of *Constantinople*, hearing that *England* was an Island,

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desired to know, how many Miles it was about, in order, we supposed, to make an estimate of our King's Greatness and Strength by the extent and compass of it.

One of the great Astrologers of *Constantinople*, having heard that I had a pair of Globes in my Chamber, made me a Visit on purpose to see their contrivance, being introduced by a worthy Gentleman of our own Nation: After the first Ceremonies were over, I took my Terrestrial Globe, and rectified it to the position of the Place, and pointed to the several Circles both without and upon it, and told him in short the several uses of them: Then shewed him how *Constantinople* beared from *Candia* at that time Besieged, *Cair*, *Aleppo*, *Mecca*, and other chief Places of the Empire, with the other Parts of the World: At which he was mightily surprized to see the whole Earth and Sea represented in that Figure and in so narrow a compass, and pleased himself with turning the Globe round several times together. Afterwards I set before him the Celestial Globe, and rectified that, and shewed him how all the noted Constellations were exactly described, and how they moved regularly upon their Poles, as in the Heavens; some rising, and others setting, some always above the Horison, and others always under, in an oblique Sphere, and particularly what Stars would rise that Night with us at such an Hour; the Man seemed to be ravished with the Curiosity of it, turning this Globe also several times together with his Finger, and taking a mighty Pleasure in viewing the motion of it: and yet this silly Animal

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past for a Conjurer among the *Turks*, and was look'd upon as one that could foretel the events of Battels, the fates of Empires, and the end of the World.

They have no Genius for Sea-Voyages, and consequently are very Raw and Unexperienc'd in the Art of Navigation, scarce venturing to Sail out of Sight of Land. I speak of the natural *Turks*, who Trade either into the *Black Sea*, or some part of the *Morea*, or between *Constantinople* and *Alexandria*; and not of the Pyrats of *Barbary*, who are for the most part Renegado's, and learn'd their Skill in Christendom, which they exercise so much to the Terror and Damage of it. A *Turkish* Compass consists but of eight Points, the four Cardinal and four Collateral; they being at a mighty Loss how to Sail by a side Wind, when by hauling their Sails sharp, they might lie their Course, and much more, when they are in the Winds Eye, not knowing how to make Tacks and Bords, but choose rather to make hast into some Neighbouring Port, 'till the Wind blows fair. An *English* and *Turkish* Vessel both bound for the Bay of *Saloniki*, at the time of the Grand Signior's being there, past together out of the *Hellespont*; but foul Weather happening, the *Turks* got into *Lemnos*; while our Men kept at Sea and persued their Voyage, and after three Weeks stay, returned back to us, observing in their way, that the *Turks* remained in the same place where they left them, for want of a Fore-Wind to put to Sea in.

They

They trouble not themselves with reading the Histories of other Nations or of antient times, much less with the Study of *Chronology*, without which, History is very lame and imperfect; which is the cause of those ridiculous and childish Mistakes, which pass current and uncontradicted among them. For instance, they make *Job* one of *Solomon*'s Judges and *(Iscander) Alexander* the great Captain General of his Army. They number *Philip* of *Macedon* among the Ancestors of our *Blessed Saviour*, and believe that *Sampson*, *Jonas*, and St. *George* were his Contemporaries. In this they are more excusable then their false Prophet *Mahomet*, who in his *Alcoran* has perverted several Historical Notices in the Writings of the Old Testament, and is guilty of vile and absurd Pseudo-chronisms. To remedy this defect, of which he was very conscious, and the better to understand the States of *Christendom*, and the particular Kingdoms and Republicks of it, the late Great and Wise *Vizir*, *Achmet*, made his Interpreter *Panagiotti*, a Learned *Greek*, at leisure Hours, even at the Siege of *Candia*, as well as at other times, read several ancient Histories to him, and render them *Extempore* into the *Turkish* Language, and particularly *Blacus Atlas*, with which he was mightily pleased, and made great use of, and truly gained the Reputation of a solid and judicious States-man, as well as Souldier among the *Christian* Ministers, who in the ordinary course of their Negotiations apply'd themselves to him.

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Tho' their Year be according to the course of the Moon, and so the *Turkish* Months run round the civil Year in a Circle of thirty three Years and a few odd Days, yet they celebrate the *Neuruz*, which signifies in the *Persian* Tongue the New Year, the twenty first Day of *March* (on which Day the vernal Equinox was fixed by the *Greeks* and other Oriental *Christians*, in the time of the Emperor *Constantine*, who made no Provision for the προήγεσις ἰσημερινὴ, or Precession, which in process of Time the inequality between the Civil and Astronomical Year must necessarily produce) at which time the *Cadyes* and other annual Magistrates, and Farmors of the Customs take Place, and reckon to that Day twelve Month again.

In their civil Deportment and Behaviour one towards another, the left Hand is the more Worthy and Honourable Place, except among their Ecclesiasticks; and the Reason they alledge is, because they Write from the right Hand, and the Sword is worn on the left Side, and so is more at his disposal, who walks on that Hand. The chief *Vizir* accordingly in the *Divan* sits at the left Hand of the *Mufty*, each maintaining their Right of Precedence according to this way of decision.

In their Moschs they sit without any distinction of degrees.

Some of the more zealous *Turks* cause to be engraven on their Scymitars and Bucklers a Sentence out of the sixty first *Surat*, which is concerning Fighting or Battle-array, and contains Incouragements to Fight in the *Way*

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and Paths of God, as the Impostor Words it; for which he assures them, besides assistance from Heaven to help them to get the Victory over their Enemies, and that *God will Pardon their Sins and bring them to Paradice.* Thus spirited with Zeal, a *Turk* lays about him with Fury, when he is a fighting, and seems ambitious of dying to gain the delights of Paradice, at least indifferent whether he dies or lives.

The *Turks* are as to their Temper serious, or rather inclining to morosity, seldom Laughing, which is accounted an argument of great Vanity and Lightness. They perform the Exercises, which they use in the way of Diversion, as Shooting and Hunting, with a great deal of gravity, as if they designed them more for Health than for Pleasure; and this too but seldom. The better and richer sort, who have nothing to do, sitting all Day at Home, lolling upon a Sofa or rais'd Place in their Rooms, and taking Tobacco, which their Slaves fill and light for them: And if they retire in the Summer or Autumn, for a Week or Fort-night to some convenient Fountain in a Wood with their Women, it is chiefly to enjoy the Refreshments of the cool Air. In the times of Triumph indeed for some great Success obtained against the *Christians*, when the Shops are open for three Nights together, and hung with Lights, as well as the Spires of the Moschs in curious Figures, they are guilty of extravagant Mirth, running up and down the Streets in Companies, and sometimes Singing and Dancing after their rude way; but this fit being

over

over, they soon return to their former Melancholly. In the Coffee-Houses where they use to resort to Tipple, there is usually one hired by the Owners to read either an idle Book of Tales, which they admire as Wit, or filthy obscene Stories, with which they seem wonderfully affected and pleased, few of them being able to Read. These are the Schools, which they frequent for their Information, tho' in times of War, when things went ill with them, their Discourses would be of the ill Government; and the Grand Signior himself and his chief Ministers could not escape their Censures, which manifestly tending to Sedition, and to the heightning of their Discontents by their mutual Complaints, and by this free venting of their Greivances during the War at *Candia*, the Wise Vizir seeing the evil Consequences that would follow, if such Meetings and Discourses were any longer tolerated, Commanded, that all the publick Coffee-houses should be shut up in *Constantinople* and several other great Cities of the Empire, where the Malecontents used to rendezvouz themselves, and find fault upon every ill Success and Miscarriage with the administration of Affairs.

The custom of the *Turks* to salute the Emperor or the *Vizir Bassa*'s with loud Acclamations and Wishes of Health and long Life, when they appear first in their Houses or any publick Place, is derived from the *Greeks*, who took it from the *Romans*. This was done by them in a kind of Singing Tone; whence *Luitprandus* Bishop of *Cremona* tells us, that

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in a certain Procession (περέλυσις) at which he was present, they Sang to the Emperor *Nicephorus* πολλά ἔτη that is, many Years, (which *Codinus*, who lived just about the taking of *Constantinople*, by the *Turks*, expresses τὸ ψάλλειν τὸ πολυχρόνιον or by τὸ πολυχρόνιζειν and the wish or salute by πολυχρόνισμα) and at Dinner the *Greeks* then present wish'd with a loud Voice to the Emperor and *Bardas*, *Ut Deus annos multiplicet*, as he Translates the *Greek*.

The *Turkish* Coin in it self is pitiful and inconsiderable, which I ascribe not only to their want of Bullion, but to their little Skill in matters relating to the Mint. Hence it comes to pass that Zecchines and Hungars for Gold, and *Spanish* Dollars and Zalotts for Silver stampt in *Christendom* pass current among them, most of the great Payments being made in them, they not caring either through Ignorance or Sloth to follow the Example of the *Indian* or *Persian* Emperors, who usually melt down the *Christian* Mony imported by the Merchants into their several Countries, and give it a new Stamp. The most usual pieces are the Sheriphi of Gold, somewhat less in value than a *Venetian* Zecchine, and Aspers; ten of which are equal to six Pence *English*, and some few three Asper Pieces. A Mangur is an ugly old Copper Piece, eight of which make but one Asper, and is not I think a *Turkish* Coin, but rather *Greek*. They have no Arms upon their Coin, only Letters embossed on both sides, containing the Emperor's Name, or some short Sentence out of the *Alcoran*.

The *Turks* look upon Earthquakes as Ominous, as the vulgar do upon Eclipses, not

understanding the Philosophy of them. During my stay in *Constantinople*, which was above 2 Years, there hapned but one, which was *October* 26. 1669. about six a Clock in the Morning a stark Calm preceeding. It lasted very near a Minute, and we at *Pera* and *Galata* were as sensible of it, as those who were on the other side of the Water; but praised be God nothing fell, and we were soon rid of the Fears in which this frightful Accident had cast us, being in our Beds, and not able by reason of the Surprize in so little a space to have past through a Gallery down a pair of Stairs into the Court, if we had attempted it. The *Turks* made direful Reflexions on it, as if some Calamity would inevitably fall upon the Empire, quickly forgetting the great Triumphings and Rejoycings which they expreſt but a few Days before for the Surrendry of *Candia*. In the Year 1668. in *August*, the Earth shook more or less for forty-seven Days together in the lesser *Asia* at *Anguri (Ancyra)*, and for fifteen at *Bacbasar*, as we heard from a *Scotch* Merchant, who liv'd there: And particularly, that at this latter Place on the second of *August*, between three and four of the Clock in the Afternoon it lasted for a quarter of an Hour; several Houses were overthrown, and some hundreds of Chimneys fell (it being a very populous Town) and yet there were but seven kill'd. The trembling being so violent, both *Turks* and *Christians* forsook their Houses, and betook themselves to the Fields, Vineyards, and Gardens, where they made their Abode for several Days.

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Their Punishments are very severe, this being judg'd the most effectual way to prevent all publick Disorders and Mischiefs. They use no great Formality in their Processes: If the Criminal be taken in the Fact, and the Witnesses ready and present to attest it, and sometimes if there be but probable circumstances, without full Conviction, condemn him; and soon after Sentence, sometimes an Hour, or less, hurry him away to Execution. For an ordinary Crime, hanging is the usual Death: But for Robbery and Murder, commited upon the High Way by such as Rob in Parties and alarm whole Provinces, or for Sacriledge, or for any hainous Crime against the Government, either Gaunching or Excoriation, or cutting off the Legs and Arms, and leaving the Trunk of the Body in the High Way, or Empaling, that is, thrusting an Iron Stake through the Body out under the Neck or at the Mouth; in which extreme Torment the miserable Wretch may live two or three Days, if the Guts or the Heart happen not to be wounded by the pointed Spike in its Passage. This Punishment seems to have been in use among the *Romans*, *Seneca*'s Epist. 14. *Cogita hoc loco carcerem, & cruces, & eculeos, & uncum, & adactum per medium hominem, qui per os emergat, stipitem:* and so in his Book *De Consolatione ad Marciam cap.* 20. *Ali capite conversos in terram suspendere: Alii per obscena stipitem egerunt: Alii brachia patibulo explicuerunt.* Murder is seldom Pardon'd, and especially if the Relations of the Murder'd Person demand Justice.

The Circumciſion, tho' it be a Sacred Right, is perform'd in their private Houſes, and never in the Moſchs.

The Women colour their Eye-Brows and Lids with an ugly black Powder, I ſuppoſe, to ſet off their Beauty by ſuch a Shadow; and their Nails with the Powder of *Kanna*, which gives them a Tincture of faint Red, like Brick (as they do the Tails and Hoofs of Horſes) which they look upon as a great Ornament. Their great diverſion is Bathing; ſometimes thrice, if not four times a Week. They do not permit them to go to Church in time of Prayer, for fear they ſhould ſpoil their Devotion: The *Turks* being of ſo bruti ſh a Temper, that their Luſt is rais'd upon the ſight of a fair Object. They are call'd oftentimes by the Names of Flowers and Fruits, and ſometimes Phantaſtick Names are given them, ſuch as *Sucar Birpara*, or bit of Sugar, *Dil Ferib*, or Raviſher of Hearts, and the like.

Their Skill in Agriculture is very mean. In their Gardens they have ſeveral little Trenches to convey Water, where it may be moſt neceſſary for their Plants and Flowers. They know little or nothing of manuring their Grounds: Sometimes they burn their Fields and Vineyards after Harveſt and Vintage, partly to deſtroy the Vermin, and partly to enrich the Soil. They tread out their Corn with Oxen, drawing a ſquare Plank Board, about a Foot and a half or two Foot over, ſtudded with Flints, and winnow it upon their threſhing Floors in the open Air, the Wind blowing away the Chaff. They

feed

feed their Horses with Barly and chopt Straw; for I do not remember ever to have seen any Oats among them; and they make but little Hay.

For Draught of great Weight in their Carts they make use of Buffalo's.

Camels will endure Travel four Days together without Water, and will eat tops of Thistles, Shrubs, or any kind of Boughs: They are very sure-footed, and kneel when they are a loading, and live to a considerable number of Years, some even to sixty.

The chief Furniture of their Houses are Carpets or Mats of *Grand Cairo*, neatly wrought with Straw, spread upon the Ground; they having no occasion of Chairs, Couches, Stools, or Tables; their postures within Doors, being different from ours. They have no Hangings, but their Walls are whited and set off with Painting, only adorn'd with a kind of Porcelane; no Beds clos'd with Curtains.

They seal not with Wax, but Ink, at the bottom of the Paper the Emperor's Name being usually written with Flourishes and in perplext Characters: Nor have they any Coats of Arms upon their Seals, there being no such thing as Gentility among them.

Some of them, notwithstanding their Zeal for *Mahomet* and the Religion by him establish'd, retain not only a favourable and honourable Opinion of our Blessed *Saviour*, but even place some kind of Confidence in the usage of his Name, or of the Words of the Gospel, tho' it may seem to be wholly in the way of Superstition. Thus in their Amu-

lets, which they call *Chaimaili*, being little bits of Paper of two or three Fingers breadth, roul'd up in pieces of Silk, containing several short Prayers or Sentences out of the *Alcoran*, with several Circles with other Figures, they usually inscribe the Holy and Venerable Name of *JESUS*, or the Figure of the Cross, or the first Words of St. *John*'s Gospel, and the like; they hang them about their Necks, or place them under their Arm-pits, or in their Bosom near their Hearts (being the same with what the *Greeks* call ἐγκόλπια) and especially when they go to War, as a preservative against the Dangers of it; and indeed against any misfortune whatsoever. Some have them sow'd within their Caps: And I heard of a *Turk* who was so superstitious herein, that he always pluck'd it off, and was uncover'd when he had occasion to make Water. Some are such Bigots in their Religion, and so furious against the Christians, that not only they treat them with all imaginable Scorn and Contempt, but take it ill to be salam'd or saluted by them, as if it were the effect of Sawcineſs or unbecoming Familiarity. Their Malice against the Christians makes them envy the rich Furs they line their Vests with, and it is a trouble to these hypocritical Zealots to see the *Franks* ride upon their fine *Arabian* Horses.

The respect which they shew the *Alcoran* is wonderful: They dare not open the Leaves of it with unwashen Hands, according to the Advice or Command written in *Arabick* upon the Cover, *Let no one touch this Book, but he that is clean.* They kiss it, and bend their Heads

Heads and touch their Eyes with it, both when they open it and shut it.

The *Janizaries*, when they attend upon *Christian Ambassadors* to their Audience, seem to appear in their Bravery, and in a Habit far from that of a Soldier, being without either Fire-Arms or Swords, (which latter are not worn but in time of Service, or when they are upon a March, or embodied, wearing a Cap made of Camel's Hair, with a broad Flap dangling behind, a gilt embroider'd Wreath running round it, and an oblong piece of Brass rising up from the middle of their Forehead near a Foot, with a great Club in their Hand, like inferior Officers of the Civil Government. But when they are in the Camp, they throw off their upper Vest, and Turbants, which they wear at all other usual times, as troublesome, and put on a *Fess*, or red Cap, which sits close to their Head, and tuck up their *Duliman* or long Coat, to their Girdle, that they may be the more quick and expedite in their Charge.

They affect finery and neatness in their Cloths and Shashes; not so much as a spot to be seen upon them, and in rainy or suspicious Weather, are very careful how they go abroad without their *Yamurlicks*, which is a kind of Coat they throw over their Heads at such times.

Their Pans and Dishes are for the most part of Copper, but so handsomly Tinn'd over, that they look like Silver.

There are thousands of Gypsies or *Zinganies* in *Turky*, who live the same idle nasty

kind of Life, as they do in *Christendom*, and pretend to the same Art of telling Fortunes; and are look'd upon as the Off-scouring of Mankind. It is accounted the extremest point of human Misery to be a Slave to any of this sort of Cattel.

The *Haggi*, or Pilgrims, that have been at *Mecca* and *Medina*, forbear to drink Wine most Religiously, out of a perswasion, that one drop would efface all the Merits of that troublesome and expensive Journey; and some have been possess'd with such a mad Zeal, that they have blinded themselves after their having been bless'd with the sight of *Mahomet*'s Sepulcher.

After *Jatzih*, that is, an Hour and a half in the Night, throughout the whole Year, there is as great a silence in the Streets as at Midnight: The Emperor *Achmet* in the Year 1611. having made an Order, that no one should presume to be out of his House after that time; which is to this Day most punctually observed. The *Bostangi bashi*, who has the Command of all the *Agiamoglans* in the *Seraglio*, the *Topgibashi* or such great Officers attended with a great Train of armed Men, walking the Rounds, and drubbing such as they find abroad at unseasonable Hours of what Nation or Quality soever, except Physicians, Chyrurgeons, and Apothecaries, whom they allow at all times to visit the Sick.

The *Turkmans*, (for so they are peculiarly called, as if they were the true Descendents of the *Old Turks* or *Scythians*, whose wandring kind of Life is described by the Poet;

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Ἀμαξόβιοι { *Nulla domus, plaustris habitant, migrare per arva*
Mos, atq; errantes circumvectare penates.)

have no fixt Residence any where, but Travel with their Families and Cattle from Place to Place, carrying their Wives and Children upon Camels; they pitch their Tents usually near Rivers and Fountains, for the convenience of Water, and according as their necessities require, make a longer or a shorter stay. Their whole Estate consists in their numerous Flocks and Herds, which they sell upon occasion to supply themselves with what they want, at the Towns they pass by. Their only concern is how to enjoy the Benefits and Blessings of Nature, without the troubles and turmoils and disquiets of Life; being contented and happy in one another's Company, void of all Ambition and Envy, Courteous and Humane to Strangers, that may want their Help and Assistance, kindly entertaining them with such Provision as their Folds afford. I have met with some Companies of these harmless Wanderers in my Travels. The Country lies open without any Inclosures, and the Propriety not being vested in any one, they Travel thro' the Plains unmolested, and find excellent Pasturage every where. The *Turks* Till no more Ground than will serve their necessities: Being supplied with Corn from *Ægypt*, and from *Moldavia* and *Walachia*, by the way of the *Black Sea*, letting vast Tracts of Ground lie wast and

and uncultivated; so that their Sloth herein sometimes is justly punished with Dearths.

They have nothing to shew for their Houses and Possessior, but an *Hogiet* or piece of Paper subscribed by the *Cadi*, if they have acquired them by their Mony, or that they were their Fathers before them.

The *Dervises* generally are Melancholy, and place the greatest part of their Religion in Abstinence and other Severities. Some cut their Flesh, others vow not to speak for six or seven Years, or all their Lives long, tho' never so much provoked or distressed. Their Garments are made of a course sort of Wool or Goat's Hair: They are tied up by the Vow of their Order ever from Marrying. Several of this Sect in the heighth of their Religious Phrenzy have attempted upon the Lives of the Emperors themselves, (at whose Government they have taken disgust) as *Mahomet* the second, and *Achmet*, as if such desperate Attempts were fatal to Bigots in all Religions.

They pay a mighty Veneration to any Relique of *Mahomet*, his Banner is still preserved in the Treasury of the *Seraglio*, and is look'd upon as the great Security of the Empire. They believe that it was sent from Heaven, and conveyed into the Hands of *Mahomet*, by the Angel *Gabriel*, as a Pledge and Sign of Success and Victory in his Battels against the *Christians*, and all other Enemies of the *Musulman*-Faith. It was sent to *Candia* to encourage the Soldiers to endure the fatigue of that long and tedious Siege; and when it was brought thence after the

Sur-

Surrendry of that City, to be deposited in its usual Place, the *Vizir* gave several *Christian* Slaves, that row'd in the Gally that was fraught with this Holy Ware, their Liberty. They pretend to have some Rags of *Mahomet*'s Vest, to which they ascribe great Virtue. In confidence of which, the Emperor *Achmet*, in the time of a great Fire which raged at *Constantinople*, when all other means fail'd, dipt part of them in Water to be sprinkled upon the Fire to rebate the Fury of it.

Next to the *Mufti* or *Cadaleskires* are the *Mollas*, of which these four are the chiefest in Dignity. The Molla of *Galata*, *Adrianople*, *Aleppo*, *Prusa*; and after them are reckoned these eight, *Stambol Ephendi*, *Larissa*, *Misir* or *Cairo*, *Sham* or *Damascus*, *Diarbekir* or *Mesopotamia*, *Cutaia*, *Sophia*, *Philippi*.

The Priests have no Habit peculiar to their Profession, whereby they are distinguish'd from others. If they are put from their Moschs for miscarriage or neglect of doing their Duty, or if they think fit to resign and be Priests no longer, they may betake themselves without any Scandal to secular Employments, their former Character and Quality wholly ceasing. While they remain Priests, they counterfeit a more than ordinary Gravity in their Discourse and Walking: and affect to wear Turbants swelling out, and made up with more cross folds: which was all the difference which I could observe by their Head Attire, which is various, tho' I could not find that this was constantly and strictly observed.

In

In *Byram* time, which is the great Feſtival of the Year, at which time every one looks cheerfully and merrily, among other ſigns of mutual Reſpect, they beſprinkle one another with ſweet Water. They indulge to ſeveral Sports: and ſome are mightily pleaſed with ſwinging in the open Air, the ordinary ſort of People eſpecially, paying only a few Aſpers for the diverſion.

The Government is perfectly Arbitrary and Deſpotical; the Will and Pleaſure of the Emperor having the force and power of a Law, and oftentimes is above it. His bare Command without any proceſs is enough to take off the Head of any Perſon, (tho' never ſo Eminent in Dignity, tho' uſually for formality and to ſilence the Murmurings of the Soldiery and People, the Sentence is confirm'd by the *Mufti*) ſometimes *Baſſa*'s who have amaſſed great Treaſures in their Governments, are cut off in their own Houſes in the midſt of their Retinue, the Meſſengers of Death producing the Imperial Command, uſually ſent in a black Purſe, and not a Sword drawn in their Defence. Others, if they are obnoxious to the leaſt Umbrage or Jealouſie, tho' diſmiſt the *Seraglio* with all poſſible demonſtrations of the Grand *Signior*'s Favour, and with Rich Preſents in order to take poſſeſſion of Places of great Command in the Empire, before they have got two or three Days Journey from *Conſtantinople*, have been overtaken and ſtrangled. In the Army Commands are given according to Merit, Courage and Conduct are ſure to be rewarded, the way lying open to the meaneſt Soldier

dier to raise himself to be the chief of his Order. But other Preferments depend upon meer Chance, and upon the fansie of the Emperor, whether the Person be fit or no, and they are as soon lost. The least ill Success or Miscarriage proves oftentimes fatal, and a more lucky Man is put in his Place, and he succeeded by a third, if unfortunate in a Design, tho' managed with never so much Prudence and Valour. They admit of no hereditary Honours, and have no respect to Descent or Blood, except the *Ottoman* Family: He only is Great and Noble, whom the Emperor favours, and while his Command lasts. According to a tradition, that passes current among them, a Bassa's Son by a *Sultana* or a Daughter or Sister of the Emperor can rise no higher than to be a *Sangiacbei* or Governor of some little Province, much inferior to a Bassa and under his Jurisdiction. Being born of Slaves for the most part, they do not pride themselves in their Birth, very few among them being scarce able to give any account of their Grandfathers. They have no Sirnames, but are distinguish'd by their Possessions and places of Abode, and enjoying by Law a Liberty of having what Women they please, they have little or no regard to Alliance or Kindred.

Their Empire owes the continuance of its being to the severity of the Government, which oftentimes takes place without regard either to Justice or Equity, and to their frequent Wars, which prevent all occasions of Mutiny and Faction among the Soldiers, which happen frequently when unimploy'd.

So

So that tho' Ambition may put a warlike Sultan upon enlarging his Territories by new Conquests, yet reason of State forces a weak and effeminate Prince, such as was *Ibrahim*, to make War for his own Security. Their Politicks are not owing to Books and Study and the Examples of past times, but to Experience and the plain Suggestions of Nature and common Sense: They have Rules of Government, which they firmly adhere to, holding the Reins strait, especially being cruel and inexorable to Criminals of State, who never are to expect any Mercy or Pity. Their Councils formerly were open, and their Designs known, and proclaimed before Hand, as if this had been a Bravery becoming their Greatness, and that they scorned to steal a Conquest. But they have learned since the Art of diffimulation, and can Lie and Swear for their Interest, and seem excessive in their Caresses to the Ministers of those Countries, which they intend to Invade. But their preparations for Arming are made with so much Noise, that an ordinary Jealousie is soon awakened by it to oppose them, in case of an Attack. They seldom or never care to have War at both Extremes of the Empire at the same time, and therefore they are mighty sollicitous to secure a Peace with *Christendom*, when they intend a War upon the *Persians*: And as much as is possible, they avoid quarrelling with two Christian Princes at once, being usually at League either with *Poland* and *Muscovy*, when they War upon *Hungary*, and so on the contrary; dreading nothing more than an Union of the

Christian Princes, bordering upon them, which would prove so fatal to their Empire, and quickly put a Period to their Greatness. For hereby they would be put upon a necessity of making a defensive War to their great Loss and Disadvantage, and at last either be forced to beg a Peace of the *Christians*, or run the hazard of losing all, by a further Prosecution of War.

This they are very sensible of, and therefore as they take all occasion to promote Quarrels and Dissentions in *Hungary* and *Transylvania*, so they greatly rejoyce, when the Princes of *Christendom* are at War one with another. This is their great time of Advantage, and they know that it is their true Interest to pursue it, tho' they do not always, by reason of the ill condition of their own Affairs, make use of it. During the Civil Wars of *Germany*, the Bassa's and other Commanders of the Army were very importunate with the grand Signior, to make a War on that side, and to enlarge his Conquests as far as *Vienna*, no conjuncture having been ever so favourable to consummate such a Design, in which *Solyman* so unhappily miscarried. They promised him an easie Victory, assuring him that the Animosities of the Princes of the Empire were so heightned, that there was no room left for a Reconciliation, that he was but to go in the Head of an Army to take Possession, and that *Austria* would Surrender at the first News of his March towards is. The Emperor was not to be moved at that time by these Insinuations and plausible Discourses; being continually

tinually urged, He as often denied, One day when they came to Renew their advice about the *German* War, He having given order before, that several Dogs should be kept for some Days without Meat, commanded that they should be brought out, being almost Starved, and Meat thrown among them, whereupon they snarled and bit one another: In the midst of their Noise and Fighting, he caused a Bear to be let loose in the same Area; the Dogs forgetting their Meat, and leaving off their fighting, ran all upon the Bear, ready to Prey upon them singly, and at last killed him. This Diversion the Emperor gave his Bassa's, and left them to make the application.

A certain Prophecy of no small Authority runs in the Minds of all the People, and has gain'd great Credit and Belief among them, that their Empire shall be ruined by a Northern Nation, which has white and yellowish Hair. The Interpretation is as various as their Fansie. Some fix this Character on the *Muscovites:* And the poor *Greeks* flatter themselves with foolish Hopes, that they are to be their Deliverers, and to rescue them from their Slavery, chiefly because they are of their Communion, and owe their Conversion to the *Christian* Faith to the Piety and Zeal of the *Grecian* Bishops formerly. Others look upon the *Swedes*, as the Persons describ'd in the Prophecy, whom they are most to fear. The Ground and Original of this fancy I suppose is owing to the great Opinion, which they have of the Valour and Courage of that Warlike Nation. The great Victories of the

Swedes

Swedes in *Germany* under *Gustavus Adolphus* were loudly proclaimed at *Constantinople*, as if there were no withstanding the shock and fury of their Arms: And their continued Successes confirmed the *Turks* in their first belief, and their Fears and their Jealousies were augmented afterwards, when *Charles Gustave*, a Prince of as heroick a Courage, and as great Abilities in the Art and Management of War as the justly admired *Gustavus*, entred *Poland* with his Army, and carried all before him, seized upon *Warsaw* and drove *Casimire* out of his Kingdom, and had almost made an entire and absolute Conquest, only a few Places holding out. This alarmed the Grand Signior and the Bassa's of the *Port*, as if the Prophecy were then about to be fulfilled, who did not care for the Company of such troublesome Neighbours, who might push on their Victories, and joyning with the *Cossacks*, advance their Arms further, and make their Country the seat of a War, which might draw after it fatal Consequences. To prevent which, Couriers are dispatch'd from *Constantinople* to *Ragotski*, Prince of *Transylvania*, then in concert with the *Swedes*, to Command him to retire with his Army out of *Poland*, as he valued the Peace and Safety of his own Country, and the Friendship of the Grand Signior, whose Tributary he was, and by whose Favour he had gain'd that Principality: And the *Crim-Tartars*, the Sworn Enemies of the *Poles*, who at that time lay heavy upon them, were wrought upon by the same Motives and Reasons of State, to clap up a Peace with them, that being freed from these Distractions, they might

unite their Forces the better together, and make Head against the *Sweeds.*

The Ambassadors of *Christian* Princes, when they are admitted by the Grand Signior to an Audience, (their Presents being then of course made, which are look'd upon as due, not to say, as an Homage) are dismiss'd in few Words, and referred by him to his *Wakil* or Deputy, as he usually stiles the chief *Vizir:* And a small number of their Retinue only permitted the Honour of kissing his Vest, and then rudely enough sent away.

The Grand Signiors keep up the State of the old *Asiatick* Princes: They do not expose themselves often to the View of the People, unless when they ride in Triumph, or upon some such solemn Occasion; when they go to the Moschs, or divert themselves in the Fields, either in Riding or Hunting, they do not love to be stared upon, or approached. It is highly Criminal to pry into their Sports, such an Insolent Curiosity being often punished with Death. The Story is Famous of *Morad* the Third, who baiting a Bear in the old Palace with a Mastiff, and espying three Fellows upon the Tower of *Bajazid's* Mosch, who had planted themselves to see the Sport, commanded their Heads to be struck off immediately, and be brought before him, which was done accordingly. Instances of such Capricio's are frequent in the *Turkish* History; this following happened during my stay at *Constantinople.*

Upon the return of Vizir *Achmet* from *Candia*, after the Surrendry of that City, and a happy end put by him to that tedious and bloody

bloody War, he acquainting the present Emperor, then at *Adrianople*, with the History of that famous Siege at large, made such terrible Representations of their and the *Venetians* Mining and Countermining one another, that the Emperor was resolved out of Curiosity to see the Experiment made of a thing, that seemed to him almost Incredible. A Work was soon raised and undermined, and above 30 Murderers and Robbers upon the High-Way and such like Villains were put into it, as it were to defend it. The Grand Signior stood upon an Eminence at some considerable distance, expecting the issue of it; upon a Signal given, the Mine was sprung, and the Fort demolished, and the poor Wretches torn piecemeal to his great Satisfaction and Amazement.

The Moon is the auspicious Planet of the *Turks*: According to the course of which they celebrate their Festivals. They begin their Months from the first appearance of it, at which time they choose, except a delay brings a great Prejudice and Inconvenience with it, to begin their great Actions. The Crescent is the Ensign of the Empire, which they Paint in Banners, and place upon the Spires of their Moschs. Next to the Day of the appearing Moon, they pitch upon *Friday*, to fight upon, to begin a Journey, and especially their Pilgrimage toward *Mecca*, or do any thing of great Consequence, as very lucky and fortunate.

A Relation of a Voyage from *Aleppo* to *Palmyra* in *Syria*; sent by the Reverend Mr. *William Hallifax* to Dr. *Edward Bernard* (late) *Savilian* Professor of Astronomy in *Oxford*, and by him communicated to Dr. *Thomas Smith*. *Reg. Soc. S.*

D. Thomæ Smitho Edoardus Bernardus, S.

QVanquam Epistolas tuas, O cor & medulla amicitiæ nostræ, & alia munera grato animo in sinum hunc recipere soleo; eas tamen Notitias, *quas tuo dono hodie accepi, tanquam germana & famæ nunquam marcescentis pignora, multo chariores habeo, &, dum vivam, reverenter adservabo. Sic enim Asianarum Ecclesiarum Pleiada e tenebris denuo excitas: sic antiquissimorum Episcoporum sedes instauras, ut candelabrum ἐπτάλοφον cum magno Theologo & Apocalypta iterum ardens ac fulgens videre mihi videor. Præterea, in descriptione urbis Constantini Silentiarios, Codinos, Gyllios, cæteros exsuperas. Fruere diu superstes hac laude, quam suam esse maluit Sponius, & præter morem ingenuum aut fas sibi abripere.*

Gaudeo

Gaudeo tamen mihi jam novum adesse munus, quod tecum queam impertire volente spero, & læto. Id est Epigrapharum Sylloge, quas a columnis Palmyrenis *Charissimus amicus,* Gulielmus Hallifaxius *pulchro studio descripsit. Utinam* Syriaca *plura ipse addisset sub Græcis, & Epocham* Palmyrenam *a* Seleuco *victore, non ab* Alexandri *magni obitu incepisset. Historiæ vero* Augustæ *scriptores qui teruntur, &* Herodianus *Grammaticus pleraque Inscriptionum istarum multum illustrant. Verum isthæc vix sunt nostri otii. Attamen si hæc commiseris* Philosophicarum Transactionum, *ut nunc loquuntur, conditoribus haud injucundum πεῤῥωμα fuerit, donec vir illustris & adprime doctus* D. Cuperus *uberiora forte ediderit de urbe* Solomonis *ejusque reliquiis. Vale vir venerabilis.*

Oxoniæ *Nonis* Octobribus
A. D. CIↃIↃCXCV.

Reverend Sir,

HAving promised you an Account of my Voyage to *Tadmor*, I cannot now Excuse my self from being as good as my Word, whatever Censure I may incur of having mispent my Mony and Time in search of such unprofitable Curiosities; or what I more fear, of having made such poor Improvements, of which a Man of larger Reading and Understanding, might have afforded much greater Information. We departed *Aleppo* on *Michaelmas-day*, 1691. and in six easie Days Travel over a Desart Country, came

to *Tadmor*; Journying almost continually to the South, with very little variation to the Eastward. As we rode into the Town, we took notice of a Castle about half an Hours distance from it, and so situated as to Command both the Pass into the Hills, by which we entred, and the City too. But we could easily perceive it was no Old Building, retaining no Foot-steps of the exquisite Workman-ship and Ingenuity of the Ancients. Upon Enquiry we were informed, that it was built by *Man-Ogle*, a Prince of the *Druces*, in the Reign of *Amurath* the Third, *Anno D. N.* 1585. But I know not how to give much Credit to this Story, because I find not that either *Man-Ogle*, or any *Drucian* Prince, was ever Powerful in these Parts, their strength lying on Mount *Libanus*, and along the Coast of *Sydon*, *Berytus*, *&c.* 'Tis a Work of more Labour than Art, and the very Situation alone is enough to render it almost Impregnable; standing on the top of a very high Hill, enclosed with a deep Ditch, cut out of the very Rock, over which there was only one sole Passage by a Draw-Bridge: This Bridge too is now broken down; so that there is no Entrance remaining, unless you will be at the Pains to clamber up the Rock, which is in one place feasible, but withal so difficult hazardous, that a small slip may endanger ones Life. Nor is there any thing within to be seen sufficient to recompence your Trouble of getting up to it, the Building being confused, and the Rooms very ill contrived. Upon the top of the Hill there

Tadmor Castle.

is

is a Well of a prodigious depth, as certainly it must be a great way to come at Water from the top of such a Rock, the Ditch that surrounds it, not having the least appearance of moisture therein; which made it therefore seem more strange that a Wild Boar should rush out thence among our Horses, when we rode up to take a more particular View of the Place. This Castle stands on the North side of the Town, and from hence you have the best Prospect of the Country all about. You see *Tadmor* under you inclosed on three sides with long Ridges of Mountains, which open towards the East gradually to the distance of about an Hours Riding; but to the South stretches a vast Plain beyond the reach of the Eye. In this Plain you see a large Valley of Salt affording great quantities thereof, and lying near about an Hours distance from the City. And this more probably is the Valley of Salt, mentioned 2 *Sam.* 8. 13. where *David* smote the *Syrians*, and slew 18000 Men, than another which lies but four Hours from *Aleppo*, and has sometimes past for it. The Air is good, but the Soil exceeding barren, nothing green to be seen therein, save some few Palm-Trees in the Gardens, and here and there about the Town. And from these Trees I conceive is obtained its Name, both in Hebrew *(Tadmor)* which signifies a Palm-Tree, and in Latin *(Palmira;)* and the whole Country is thence denominated *Syria Palmirena*; and sometimes *Solitudines Palmirenæ*: So that the Latins did not change but only Translate the old Name, which

The Valley of Salt.

therefore still obtains in these Eastern Parts, and the more Modern is wholly unknown.

Tadmor. The City it self appears to have been of a large Extent, by the space now taken up by the Ruins; but there are no Foot-steps of any Walls remaining, nor is it possible to judge of the ancient Figure of the Place. The present Inhabitants, as they are a Poor, Miserable, dirty People, so they have shut themselves up, to the Number of about Thirty or Forty Families, in little Huts made of Dirt, within the Walls of a spacious Court, which enclosed a most Magnificent Heathen Temple. Hereinto also we entred, the whole Power of the Village, if I may so call it, being gathered together at the Door, whether to stand upon their Defence, in case we proved Enemies, (for some of them had their Guns in their Hands) or out of meer Curiosity to gaze upon us, I know not. However our Guide, who was an *Arab*, whom *Assyne* (a) their present King had sent to Conduct us through the whole Voyage, being a Man known among them, we had an easie Admittance, and with a great many Welcomes in their Lauguage were led to the *Sheck*'s House, with whom we were to make our Abode. And to mention here what the Place

(a) This *Assyne* was in the Year of our Lord 1693, Deposed by the *Turks*, and one *Dor* advanced to fill his place; so that now he is constrained to live upon Rapine, being followed by a considerable Number of Men, who delight not to Labour, nor to live under any settled Government.

at

at first View represents. Certainly the World it self cannot afford the like mixture of Remains of the greatest State and Magnificence, together with the Extremity of Filth and Poverty. The nearest Parallel I can think of, is that of the Temple of *Baal*, destroyed by *Jehu*, and converted into a Draught-House, 2 *Kings* 10. 27. And if, what is not improbable, this very Place was a Temple of *Jupiter Belus*, the Similitude will run upon all Four.

The Temple.

Being thus lodged within the Place, I shall begin with a Description thereof, and proceed to what I observed remarkable without. The whole inclosed Space is a Square of 200 Yard each side, encompass'd with a high and stately Wall, built of large square Stone, and adorned with Pilasters within and without, to the number, (as near as we could compute by what is standing of the Wall, which is much the greater part) of 62 on a side. And had not the Barbarity of the *Turks*, Enemies to every thing that is splendid and noble, out of a vain Superstition, purposely beat down those beautiful Cornishes both here and in other Places, we had seen the most curious and exquisite Carvings in Stone which perhaps the World could ever boast of; as here and there a small Remainder, which has escap'd their Fury, does abundantly evidence. The West side, wherein is the Entrance, is most of it broken down, and near the middle of the Square, another higher Wall erected out of the Ruins; which shews to have been a Castle, strong but rude; the old Stones and many Pillars broken or

sawn

ſawn aſunder, being rolled into the Fabrick, and ill cemented. Within were to be ſeen the Foundations of another Wall, which probably might anſwer this Front, and that the *Mamalukes*, whoſe Workman-ſhip it ſeems moſt likely to have been, built the Caſtle here for the Security of the Place. Before the whole length of this new Front, except a narrow Paſſage which is left for an Entrance, is cut a deep Ditch, the aſcent whereof on the inner ſide is fac'd with Stone to the very Foot of the Wall, which muſt have render'd it very difficult to have aſſaulted it. The Paſſage to, and the Door it ſelf is very narrow, not wider than to receive a loaded Camel, or that two Foot-men may well walk a-breaſt. And as ſoon as you are within the firſt Door, you make a ſhort turn to the Right, and paſs on to another of the like bigneſs, which leads into the Court. But all this is but a new Building upon an old, and by this outward Wall is quite ſhrouded that Magnificent Entrance, which belonged to the firſt Fabrick; of the ſtatelineſs whereof we were enabled to judge by the two Stones which ſupported the ſides of the great Gate, each of which is 35 Foot in length, and artificially carved with Vines and cluſters of Grapes, exceeding bold and to the Life. They are both ſtanding, and in their Places, and the diſtance between them, which gives us the wideneſs of the Gate 15 Foot. But all this is now walled up to the narrow Door before mentioned. Over the little Door there is an Inſcription in *Greek*, and alſo another in another Language and Character, which I never

ſaw

ſaw till in *Tadmor*, nor underſtand what to make of it. From that in *Greek* we hoped for ſome Information; but it will be evident to any one that reads it, that the Stone was brought from another Place and caſually put in there. 'Tis thus:

ΤΟ ΜΝΗΜΕΙΟΝ ΤΟΥ ΤΑΦΕΩΝΟC ΕΚΤΙCΕΝ ΕΞ ΙΔΙΩΝ CΕΠΤΙΜΙΟC ΟΔΑΙΝΑΘΟC Ο ΛΑΜΠΡΟΤΑΤΟC CΥΝΚΛΗΤ [ΙΚΟC] ΑΙΡΑΝΟΥ ΟΥ ΑΒΑΛΛΑΘΟΥ ΤΟΥ ΝΑCΩΡΟΥΑΥ ΤΩΤΕ ΚΑΙ ΥΙΟΙC ΑΥΤΟΥ ΚΑΙ ΥΙΩΝΟΙC ΕΙC ΤΟ ΠΑΝΤΕΛΕC ΑΙΩΝΙΟΝ ΤΕΙΜΗΝ.

Under this was the unknown Characters, which I ſhall here give you a Specimen of, it being as well as it could be taken, thus. *Vide Figuram.*

The Letters between theſe [ ] Marks were not Legible, but I have ventured to ſupply the defect, as alſo you will ſee in ſome others following. Neither was the Ε in ΜΝΗΜΕΙΟΝ upon the Stone, but was doubtleſs omitted by miſtake; and the Inſcription is nothing elſe but the Inſcription of a Sepulchre, the like to which we ſaw ſeveral, as I ſhall have occaſion to mention ſome of them hereafter. And as for the other Character, it being added almoſt under every *Greek* Inſcription we ſaw, and rarely found alone, I am apt to believe it the Native Language and Character of the Place, and the Matter it contains nothing elſe but what we have in the *Greek*.

As ſoon as you are entred within the Court, you ſee the Remainders of two Rows of very Noble Marble Pillars 37 Foot high, with their

their Capitals of most exquisite Carved Work; as also must have been the Cornishes between them, before by Rude and Superstitious Hands they were broken down. Of these there are now no more than 58 remaining entire; but there must have been a great many more, for they appear to have gone quite round the whole Court, and to have supported a most spacious double Piazza or Cloyster. Of this Piazza the Walks on the West side, which is opposed to the Front of the Temple, seem to have exceeded the other in Beauty and Spaciousness; and at each end thereof are two Niches for Statues at their full length, with their Pedestals, Borders, Supporters, and Canopies, carved with the greatest Artifice and Curiosity. The Space within this once Beautiful Enclosure, which is now filled with nothing but the dirty Huts of the Inhabitants, I conceive to have been an open Court, in the midst whereof stands the Temple, encompass'd with another row of Pillars of a different Order, and much higher than the former, being above 50 Foot high. Of these remain now but 16, but there must have been about double that Number, which whether they enclosed an inner Court, or supported the Roof of a Cloyster, there being nothing now of a Roof remaining, is uncertain. Only one great Stone lies down, which seems to have reach'd from these Pillars to the Walls of the Temple. The whole Space contained within these Pillars we found to be 59 Yards in Length, and in Breadth near 28. In the midst of which Space is the Temple, extending in

Length

Length more than 33 Yards, and in Breadth 13 or 14. It points North and South, having a moſt Magnificent Entrance on the Weſt, exactly in the middle of the Building, which by the ſmall Remains yet to be ſeen, ſeems to have been one of the moſt glorious Structures in the World. I never ſaw Vines and cluſters of Grapes cut in Stone, ſo Bold, ſo Lively, and ſo Natural, in any Place: And we had doubtleſs ſeen things abundantly more curious, if they had not been maliciouſly broken to pieces. Juſt over the Door we could make a ſhift to diſcern part of the Wings of a large Spread-Eagle, extending the whole wideneſs thereof. The largeneſs whereof led me at firſt to imagine it might have been rather a Cherub over-ſhadowing the Entrance, there being nothing of the Body remaining to guide ones Judgment, and ſome little Angels or *Cupids* appear ſtill in the corners of the ſame Stone. But afterwards ſeeing other Eagles upon Stones that were fallen down, I conclude this muſt have been one likewiſe, only of a much larger ſize. Of this Temple there is nothing at preſent but the outward Walls ſtanding, in which it is obſervable, that as the Windows were not large, ſo they were made narrower towards the top, than they were below; but all adorned with excellent Carvings. Within the Walls, the *Turks*, or more probably the *Mamalukes*, have built a Roof, which is ſupported by ſmall Pillars and Arches; but a great deal lower, as well as in all other reſpects diſproportionate and inferior to what the Ancient Covering muſt have

have been. And they have converted the place into a Mosque, having added to the South End thereof new Ornaments after their manner, with *Arabick* Inscriptions and Sentences out of the *Alcoran*, wrote in Flourishrs and Wreaths, not without Art. But at the North End of the Building, which is shut out of the Mosque, are Relicks of much greater Artifice and Beauty. Whether they were in the Nature of Canopies over some Altars placed there, or to what other use they served, I am not able to conjecture. They are beautified with the most curious Fretwork and Carvings; in the midst of which is a Dome or Cupola, above six Foot Diameter, which we found above to be of one piece; whether hewn out of a Rock entire, or made of some Artificial Cement or Composition, by Time hardened into a Lapideous Substance, seems doubtful; though I am rather inclined to believe the latter. It is in fine, a most exquisite Piece of Workmanship, and on which I could have bestowed more time to view it, than what was allowed us, hastening to other Sights.

Having taken this Survey of the Temple, we went Abroad, where our Eyes were presently accosted with an amazing sight of a multitude of Marble Pillars, standing scattered up and down, for the space of near a Mile of Ground, this way and that, but so disposed as to afford no solid Foundation to judge, what sort of Structures they formerly framed. I pass by the Ruins of a Mosch, which directing our Course Northward, was the first thing occurr'd to our View, after

A Mosch.

after we came out of the Court of the Temple, which though of a more Artificial Frame and Composure than many I have seen, yet is not worthy to stop us in the way to things both of greater Antiquity, and every way more noble and worthy our Consideration. Having therefore past this, you have the Prospect of such Magnificent Ruins, that if it be lawful to frame a Conjecture of the Original Beauty of the Place, by what is still remaining, I question somewhat whether any City in the World could have challenged Precedence of this in its Glory. But it being impossible as they now stand to reduce them to any regular Method, I must be forced to give you a rude Account of them as they came in sight; and which will fall much short of the Greatness and Statelines which they shew to the Eye.

An Obelisk.

Advancing then towards the North, you have before you a very tall and stately Oblisk or Pillar, consisting of seven large Stones, besides its Capital and a wreath'd Work above it; the Carvings here, as in all other Places, being extraordinary fine. The height of it is above 50 Foot, and upon it I conceive may have stood a Statue, which the *Turks*, zealous Enemies of all Imagery, have thrown down, and broken in pieces. 'Tis in compass, just above the Pedestal, 12 Foot and a half. On each Hand of this, towards the East and West, you see two other large Pillars, each a quarter of a Mile distant from you, which seem to have some Correspondence one to the other. And there is a piece

of

of another standing near that of the East, which would incline one to think there was once a continued row of them. The height of this to the East I took with my Quadrant, and conclude to be more than 42 Foot high, and the Circumference proportionable. Upon the Body thereof is the following Inscription.

Η ΒΟΥΛΗ ΚΑΙ Ο ΔΗΜΟϹ ΛΛΙΛΑΜϵΝΑ ΠΑΝΟΥ ΜΟΚΙΜΟΥ ΤΟΥ ΑΙΡΑΝΟΥ ΤΟΥ ΜΑΘΘΑ ΚΑΙ ΑΙΡΑΝΗΝ ΤΟΝ ΠΑΤϵΡΑ ΑΥΤΟΥ ϵΥϹϵΒϵΙϹ ΚΑΙ ΦΙΛΟΠΑΤΡΙΔΑϹ Κ(ΑΙ) ΠΑΝΤΙ ΤΡΟΠω (ϵΥ)ϹϵΙΜωϹ ΑΡϵϹΑΝΤΑϹ ΤΗ ΠΑΤΡΙΔΙ ΚΑΙ ΠΑΤΡΙΟΙϹ ΘϵΟΙϹ ΤϵΙΜΗϹ ΧΑΡΙΝ ϵΤΟΥϹ Ν Υ Λ ΜΗΝΟϹ ΞΑΝΔΙΚΟΥ.

I perswade my self it would be but lost Labour to spend time in making Reflections upon this or the following Inscriptions; as for the Knowledge they may exhibit to the World, your own Conjectures will more happily lead you unto it, than any thing I am like to suggest. It seems however pretty evident they were a Free State, governed by a Senate and People, though perhaps under the Protection of great Empires, the *Parthians*, it is probable, first, and afterward the *Romans*, who for a long time contended for the Mastery here in the East. And this Government might continue among them till about the time of *Aurelian*, who demolished the Place, and led *Zenobia*, Wife of *Odenatus*, Captive to *Rome*: Who, though she be called Queen, yet I find not that ever her Husband had the Title of King; but was only

ly one of the Chief Inhabitants, a Leading Man in the Senate (as 'tis probable this *Alilamanes* and *Airanes* were before him) who while the *Romans* were busied in *Europe*, made himself great here, and by his own Force repelled the *Parthians*; who having Master'd whatever was held by the *Romans* on the other side of *Euphrates*, made an Incursion into *Syria*, but were by *Odenatus* driven back beyond the River. In the course of these Wars *Odenatus* was slain, but his Wife *Zenobia*, being a Woman of a Masculine Spirit, not only kept her Ground against her Enemies Abroad, but maintained her Authority at Home, keeping the Government in her Hands. Afterwards out of a desire to cast off the *Roman* Yoke, she caused the whole Garrison, which was left there by *Aurelian*, to be barbarously cut off: Which bringing *Aurelian* back with his Army, he quickly took the City, and destroyed it, putting the Inhabitants to the Sword, and carrying *Zenobia* Captive to *Rome*; which was the Fatal Period of the Glory of the Place. This Custom of theirs of running up their Genealogies or Pedigrees to the fourth or fifth Generation, shews them to have borrowed some of their Fashions from their Neighbours the *Jews*, with whom it is not unlikely they had of old great Commerce; and perhaps many of them were descended from that People, *Zenobia* her self being said to have been a *Jewess*: Or else this must have been the manner of all the Eastern Nations. Their *Æra* or Account of Time they begin from the Death of *Alexander* the Great, as the *Syrians* generally do;

the very Christians at this Day following the same usage. Yet though they mark the Date of the Year by *Greek* Letters, you may observe they place them a different way from the *Greeks*, setting the lesser Number first, as if they were to be read backward, from the right Hand to the left; as NT here, denoting 450. The third Letter Λ, I take to stand for the Day of the Month, *viz.* the last of *Xandicus*, which is with us *April*; this and other names of Months, which are found in other Inscriptions, being borrowed from the *Macedonians* with very little variation. That they were Idolaters, is plain by the mention of their Country Gods, both here and in other Places: So that their Commerce with the *Jews*, did not, it seems, bring them to the Knowledge of the true God, or else they must have degenerated therefrom, and relapsed into Idolatry. The other Pillar towards the West in Height and Circumferance answers this, and has upon the side the following Inscription engraved.

ΗΒΟΥΛΗ ΚΑΙ Ο ΔΗΜΟC ΒΑΡΕΙΧΕΙΝ
ΑΜΡΙCΑΜCΟΥ ΤΟΥ ΙΑΡΙΒωΛΕΟΥC
ΚΑΙ ΜΟΚΙΜΟΝ ΥΙΟΝ ΑΥΤΟΥ
ЄΥCЄΒЄIC ΚΑΙ ΦΙΛΟΠΑΤΡΙΔΑC
ΤЄIΜΗC ΧΑΡΙΝ.

The Date of this is not legible, neither does one know what Judgment to make of the thing it self. That such a Pillar should be erected only to support the Inscription,

and convey these Mens Names to After-Ages, without particularizing what they did to deserve that Honour, is something strange: unless we may suppose it was a prevailing Vanity in these Eastern Countries thus to endeavour to Eternize their Fame. An Instance whereof we have in Scripture, in *Absalom*'s setting him up a Pillar, 2 *Kings* 18. 18. and perhaps before him, in *Saul*, 1 *Sam.* 15. 12. Otherwise it may appear no improbable Conjecture, that the Pillar was erected long before upon some other Occasion, and afterwards made use of to this end: And I look upon it as past all doubt that several other Inscriptions which we saw, were much more Modern than the Pillars, on which they were engraved.

Proceeding forward, directly from the Obelisk, about 100 Paces, you come to a Magnificent Entrance, vastly large and lofty, and for the exquisiteness of the Workmanship not inferior to any thing before described. The Piazza.

I wish I could add, that it had not suffered the same Fate as the rest, and then we might have seen a rare Piece of the Ancient Beauty of the Place. This Entrance leads you into a Noble Piazza of more than half a Mile long, 938 Yards according to our Measuring, and 40 Foot in breadth, enclosed with two rows of stately Marble Pillars, 26 Foot high, and 8 or 9 about. Of these remain standing and entire 129. but by a moderate Calculate there could not have been less at first than 560. Covering there is none remaining, nor any Pavement at the bottom, unless it be buried

ried under the Rubbiſh. But upon almoſt all the Pillars we found Inſcriptions, both in *Greek* and the Language unknown, of which we had time to take but very few, and thoſe not very Inſtructive. But ſuch as they are I'll preſent you them here, without obſerving any other Order, but as they happened to be tranſcribed.

ΙΟΥΛΙΟΝ ΑΥΡΗΛΙΟΝ ΖΕΒΕΙΔΑΝ
ΜΟΚΙΜΟΥ ΤΟΥ ΖΕΒΕΙΔΟΥ.....:
ΑCΘωΡΟΒΑΙΔΑΟΙ CΥΝ Α(Υ)Τω
ΚΑΤΕΛΘΟΝΤΕC ΕΙC ΟΛΟΓΕCΙΑΔΑ
ΕΝΠΟΡΟΙΑΝ ΕCΤΗCΑΝ ΑΡΕCΑΝΤΑ
ΑΥΤΟΙC ΤΕΙΜΗC ΧΑΡΙΝ ΞΑΝΔΙΚω
ΤΟΥ ΗΝΦ ΕΤΟΥC....

I give you, Sir, theſe Inſcriptions, as thoſe before, juſt as I found them, without any Amendments, ſo much as of litteral Faults, only where a Letter, or piece of a Word was not legible, if I could make a probable Conjecture what it ſhould be, I have ventured to add it. The laſt ſeems to have been put up in Memory of an Embaſſy, performed by thoſe Men that are named therein, for ſettling a Commerce and Traffick, which was to their Satisfaction accompliſh'd: But with whom, till I can find out what Place is meant by (*b*) ΟΛΟΓΕCΙΑΔΑ, I muſt remain Ignorant.

(*b*) 'Tis not improbable that ΟΛΟΓΕCΙΑC might have been the Name of a Perſon. *Vologeſes* is a known Name in Hiſtory among the *Parthian* Kings; to which the other ſeems to bear a great Affinity.

I am

I am unwilling to entertain any Thoughts of *Getia* in *Macedonia*, or of *Olgassus*, a Place mentioned by *Strabo* in *Bythinia*, which comes a little nearer the Name, being both so remote, and the City of *Tadmor* ill contrived for a Place of Trade, being far from the Sea, and without the Advantage of any River. Yet the Magnificence of the Place shews they have not wanted Riches among them: And their Salt is a Commodity which still brings them in a considerable Advantage. The Order of the Numeral Letters you may take notice is again inverted; but taking them the right way, the Year 558 falls in with the last Year of the Reign of *Alexander Severus*, which is of our Lord 234.

About the middle of the Piazza, upon another Pillar, was this following Inscription.

Η ΒΟΥΛΗ ΚΑΙ Ο ΔΗΜΟC ΙΟΥΛΙΟΝ ΑΥΡΗΛΙΟΝ ΖΗΝΟΒΙΟΝ ΤΟΝ ΚΑΙ ΖΑΒΔΙΛΑΝ ΔΙCΜΑΛΧΟΥ ΤΟΥ ΝΑCCΟΥΜΟΥ CΤΡΑΤΗΓΗCΑΝΤΑ ЄΝ ЄΠΙΔΗΜΙΑ ΘЄΟΥ ΑΛЄΞΑΝΔΡΟΥ ΚΑΙ ΥΠΗΡЄΤΗCΑΝΤΑ ΠΑΡΟΥCΙΑ ΔΙΗΝЄΚЄΙ ΡΟΥΤΙΛΛΙΟΥ ΚΡΙCΠЄΙΝΟΥ ΤΟΥ ΗΓΗCΑΜЄΝΟΥ ΚΑΙ ЄΠΙΔΗΜΗCΑCΑΙC ΟΥΗΞΙΛΛΑΤΙΟGΙΝ ΑΓΟΡΑΝΟΜΗCΑΝΤΑΤЄ ΚΑΙ ΟΥΚΟΝΙCωΝΑ ΦЄΙΔΗCΑΝΤΑ ΧΡΗΜΑΤωΝ ΚΑΙ ΚΑΛωC ΠΟΛЄΙΤЄΥCΑΜЄΝΟΝ ωC ΔΙΑ ΤΑΥΤΑ ΜΑΡΤΥΡΗΘЄΝΤΑ ΥΠΟ ΘЄΟΥ ΙΑΡΙΒωΛΟΥ ΚΑΙ ΥΠΟ ΙΟΥΛΙΟΥ..... ΤΟΥ ЄΞΟΧωΤΑΤΟΥ ЄΠΑΡΧΟΥ ΤΟΥ ΙЄΡΟΥ ΠΡΑΙΤωΡΙΟΥ ΚΑΙ ΤΗC ΠΑΤΡΙΔΟC ΤΟΝ ΦΙΛΟΠΑΤΡΙΝ ΤЄΙΜΗC ΧΑΡΙΝ ЄΤΟΥC ΔΝΦ.

This is as perfect an Inscription as any I met with, by the help of which we may make a Judgment of all the rest; at least thus far, that they were put up in Memory of some, who had behaved themselves, in those publick Offices they bore, either in their own Republick, or under the *Romans*, with Commendation; this being a Publick Place, where their Names and worthy Actions were Recorded and Transmitted to Posterity. What I further observed particularly in this, was the want of the Name after ΙΟΥΛΙΟΥ, and took notice of the like space vacant in the other Language under it; and in both places it seemed to be not worn out with Time, but voluntarily scatch'd out. Which confirms me in the Opinion that they are both one, and that the unknown was the Vulgar, as the *Greek* was the learned Language of the Place. Upon another Pillar in the same Walk was this.

CЄΠΤΙΜΙΟΝ ΟΥΟΡѠΔΗΝ ΤΟΝ ΚΡΑΤΙCΤΟΝ ЄΠΙΤΡΟΠΟΝ CЄΒΑCΤΟΥ ΔΟΥΚΗΝΑΡΙΟΝ ΚΑΙ ΑΡΟΑΠЄΤΗΝ ΙΟΥΛΙΟC ΑΥΡΗΛΙΟC ЄΑΛΜΗC ΚΑCCΙΑΝΟΥ ΤΟΥ Μ(Є)ΛЄΝΑΙΟΥ ΙΠΠЄΥC ΡѠΜΑΙѠΝ ΤΟΝ ΦΙΛΟΝ ΚΑΙ ΠΡΟCΤΑΤΗΝ ЄΤΟΥC Η·Ο Ψ . . . ΜΗΝЄΙ (Ξ)ΑΝΔΙΚѠ.

From another Pillar in the same Piazza was Transcribed this broken Inscription which follows, which I have endeavoured to make up from the former, believing them in substance the very same, with some little Alteration of Names.

CЄΠ-

CЄΠTIM(ION OYOPωΔHN) TON KPA(TICTON ЄΠITPO) ΠON CЄBAC(TOY ΔOYK)HNAPION KA[I APOAΠЄ]THN IOYAIOC AY[PHAI]OC Є[AAMHC] ΠTIACOC M[ЄAЄNAI]OC MAAωXA NACCOYMO[Y] O KPATICTOC TON[ΦIAON] KAI ΠPOCTATHN TЄIMHC ЄNЄKЄN ЄTOYC... [MHNЄIΞ]ANΔIKω.

This is so like the preceeding, that I thought I might fairly take the Liberty to make these Additions to it. And what we we may Collect from both, and divers others of a like Import, is, That as the State, the Senate, and People, did sometimes Honour those that had been in Publick Trust, with Inscriptions upon these Pillars: So when this was not done by them, private Persons had the Liberty to do the same for their Friends. And I shall give you an Instance by and by of one Engraven by a Husband in Memory of his Wife. Upon several of these Pillars are little Pedestals jetting out about the middle of them, sometimes one way only, and sometimes more, which seem to have been the Bases or standing Places of Statues. But none of these are remaining; neither is it to be expected they should, in a place which has been so long in the Hands of the *Turks*. On these Pedestals we saw many Inscriptions, sometimes when there were none upon the Body of the Pillar, and sometimes when there were. As for Instance this that follows upon the Pedestal, thus.

CЄΠTIMION AIPANHN OΔAINOΘOT TON ΛAMΠPOTATON CTNKΛHTIKON. And upon the Body of the Pillar this Imperfect one; which I dare not venture to fill up, but shall give it you as we found it.

ЄΞA..... NTωN AYPHΛI..... PHΛIOΔωP..... CTPATIωTHC ΛЄ..... KHC TωN ΠATPωN TЄIMHC KAI ЄYXAPICTIAC KAPIN ЄTOYC ΓΞΦ.

We see they esteemed it very Honourable to have their Memories preserved after this manner; but it is but little Knowledge of them we can get from hence, save now and then the Time when they lived. As here, 563 Years after the Death of *Alexander* reach to the Year of our Lord 239. Another Inscription in the same Piazza was thus.

H BOYΛ[H KAI O ΔH]MOC CЄΠTIMION TON KPATIC TON Є[ΠITPOΠON C]ЄBACTOY ΔOYKHN[APION].... ЄOΔO THN THC MHT[POKOΛω]NЄIAC KAI ANAKOMICA(NTA T)AC CYNOΔIAC ЄΞ IΔIωN KAI MAPTYΠHΘЄNTA YΠO TωN APXЄMIIOPωN KAI ΛAMIIPω C CTPATHΓHCANTA KAI AΓORANOMHCANTA THC AYTHC MHTPOKOΛωNЄIAC KAI ΠΛЄICTA OIKOΘЄN ANAΛωCANTA KAI APЄCANTA THTЄ AYTH BOYΛH KAI Tω ΔHMω KAI NYNЄI ΛAMΠPω C CYMΠOCIAPKON TωN TOY ΔIOC BHΛOY IЄ[Γ]ωN TЄIMHC ЄNЄKЄN ЄT..... ΞANΔIKω.

This

This affords a sufficient confirmation of what I before observed, that these were Honorary Inscriptions in Memory of those that had behaved themselves well in Publick Offices; of which we have several mentioned here, whereof some are very well known, but the others not easie to be met with in Books. By the Word ΜΗΤΡΟΚΟΛΩΝΕΙΑC, we may be assured that though the City was reduced by the *Romans* into the form of a Colony, yet it had a peculiar mark of Honour set upon it, to signifie that it was the chief of their Colonies in these Oriental Parts. That the Authority also of their Senate and People was continued to them. And besides that there was a Society of Men, either Curators of the Temple of *Jupiter Belus* (to whom the Temple before described perhaps was dedicated,) or Overseers of the Sports and Festivals that were celebrated in Honour of him; of which Sodality this *Septimius* was, when this Inscription was made, a *Sympositarch*, perhaps their Chief and Governour. By this too we find they did not wait for the Deaths of those they thus honoured, before they provided for the Preservation of their Memories; but Famous Men were thus Registered for After-Ages even while they were alive. Upon one of these Pedestals before described, not far from the former, was the following Inscription; which I valued the more for the little remainder it has preserved of the Name of *Palmyra*, by which the Place was known to the *Romans*.

. . . ΥΠΙΛΙΟΝ ΟΥΟΡωΔΗΝ [CΥΝΚΛ]ΗΤΙΚΟΝ ΚΑΙ ΒΟΥΛΕΥΤΗΝ ΠΑΛΜΥΡΗΝΟΝ ΒΗΛΑ ΚΑΒΟCΑΡCΑ ΤΟΝ ΦΙ[ΛΟΝ] ΤΕΙΜΗC ΧΑΡΙΝ ΕΤΟΥC Ο Φ.

The Banquetting-House.

The upper end of this spacious Piazza was shut in by a row of Pillars, standing somewhat closer than those on each side; and perhaps there might have been a kind of Banquetting-House above, but now no certain Footsteps thereof remain. But a little farther to the left Hand, and, it may be, continued with the former Walk, lie the Ruins of a very stately Building, which I am apt to believe might have been for such an use. 'Tis built of better Marble, and has an Air of Delicacy and Exquisiteness in the Work, beyond what is discernable in the Piazza. The Pillars which supported it are of one entire Stone; and on one of them that is fallen down, but so firm and strong that it has received no Injury thereby, we measured, and found 22 Foot in length, and in compass 8 Foot and 9 Inches. Among these Ruins we found the only *Latin* Inscription we saw in the Place, and that so imperfect, there is but little of it Intelligible.

. . . . . *es Orbis & Propagatores Generis Humani D. D. N. N.* Diocletianus . . . . . *ssimi Impp. Et* Constantius & Maximianus *Nobb. Cæs. Castra feliciter condiderunt.*

And upon the same Stone a little lower,

. . . . . *ntes* Ossiano Hieroclete, *V. P. Præs. Provinciæ D. N. M. O. Eorum.*

The

The Name of *Maximianus Hercules*, who was Partner in the Empire with *Diocletian* which should have followed in the Inscription, seems to have been on purpose scratch'd out, and defaced, for what reason I cannot guess. The rest is lost by the breaking of the Stone.

The Palace.

In the West side of the great Piazza are several openings for Gates leading into the Court of the Palace: Two whereof, one would easily believe when they were in their Perfection, were the most Magnificent and Glorious in the World, both for the Elegancy of the Work in general, and particularly for those stately Porphyry Pillars with which they were adorned. Each Gate had four, not standing in a Line with the others of the Wall, but placed by couples in the Front of the Gate, facing the Palace, two on one Hand, and two on the other. Of these remain two entire, and but one standing in its place. They are about 30 Foot in length, and 9 in circumference; of a Substance so exceeding hard, that it was with great difficulty we broke off a few shivers to bring home with us for a pattern of the Stone, the Art of making which, I think is quite lost. We saw several other broken pieces of Porphyry, but neither of so accurate a Mixture and Composition, nor so large as the former. The hard Fate of one I could not but lament, when I saw it debased to support the corner of a little Hutt, scarce good enough for a Dog-Kennel, or a Hogsty. The Palace it self is so entirely ruined, that no Judgment can be made what it was in its Ancient Splendor, either for the Figure or Workmanship thereof.

There

There is only here and there a broken piece of a Wall remaining, beat into pieces by Violence, and consumed by Time to that degree, that without the help of Tradition we could hardly be well assured, that a Royal Palace did once fill that Space. We may guess however that it fronted the Famous Piazza before mentioned, and was surrounded with rows of Pillars of different Orders, many of which are still standing, some plain, and some wrought and channell'd, as those immediately encompassing the Temple. And upon those little Pedestals which stood out of the middle of some of them, I observed several Inscriptions, but could not conveniently take more than one, which together with the Pillar that supported it was fallen to the Ground. 'Twas this.

ΜΑΡΘΕΙΝ ΑΛΕΞΑΝΔΡΟΥ ΤΟΥ ΚΑΠΑΔΗΤΟΥ ΟΥΑΒΑΛΛΑΘΟΥ ΤΟΥ ϹΥΜωΝΟΥ ϹΟΡΑΙΧΟϹ ΑΙΡΑΝΟΥ ΑΝΗΡ ΑΥΤΗϹ ΜΝΗΜΗϹ ΕΝΕΚΕΝ ΜΗΝΕΙ ΔΥϹΤΡω ΤΟΥ ϛ Υ ΕΤΟΥϹ.

If the rest were of a like Nature with this, we have lost no great matter by not taking them, this being only a Memorial, which a kind Husband caused to be set up in Honour of his Wife. The Month *Dystrus*, answers our *March*, and the Year 490 from the Death of *Alexander* the Great, the Year of our Lord 166.

I omitted to mention before, that under the long Walk runs a Current of hot Sulphureous Waters; and there is a Well and other

Passa-

Passages down to them. But whatever they may have been of old, they are not now so convenient as another about half a Mile Westward from hence; where there is a very good Descent into the Water, and it is still used by the People to Bath in. Near to which, upon the Pedestal of a broken Pillar, (or perhaps it might be an Altar) remains this following Inscription.

ΔΙΙ ΥΨΙCΤω ΜΕΓΙCΤω ΚΑΙ ΕΠΗΚΟω
ΒωΛΑΝΟC ΖΗΝΟΒΙΟΥ ΤΟΥ ΑΙΡΑΝΟΥ
ΤΟΥ ΜΟΚΙΜΟΥ ΤΟΥ ΜΑΘΘΑ ΕΠΙ
ΜΕΛΕΤΗ COH ΑΙΡΕΘΕΙC ΕΦΚΑC
ΠΗΓΗC ΥΠΟ ΙΑΡΙΒωΛΟΥ ΘΕΟΥ ΤΟΝ
Βω [forsan ΒωΜΟΝ] ΕΞ ΙΔΙωΝ
ΑΝΕΘΗΚΕΝ ΕΤΟΥC Δ Ο Υ ΜΗΝΟC
ΥΠΕΡΒΕΡΕΤΑΙΟΥ Κ.

I am pretty confident that the Word I have mark'd with a Line under it, is rightly taken, and therefore know not what to guess it to be, unless the proper Name of the Fountain. And upon that Supposition the Inscription is easily Intelligible, shewing that *Bolanus*, Son of *Zenobius*, &c. being elected Overseer or Curator of this Fountain, under *Jaribolus*, built this Altar to *Jupiter*, in the Year of *Alexander* 474. *i. e.* of our Lord 150. and on on the 20*th* of *October*, if the last *Kappa* be a Numeral, as I suppose it must. But who this *Jaribolus* was, on whom they bestow, as generally upon the *Roman* Emperors, whose Names occur in the Inscrip-

scriptions, the Title of ΘΕΟC, is not so facile a Conjecture. They were under the *Parthians*, before the *Romans* fell in amongst them; but the Date shews this to be after the time of *Hadrian*, and so after their coming. Nay, and in an Inscription before mentioned, which is of a later Date than this by 88 Years, we have the Name of the same Person. Hot Sulphureous Baths are things very frequent in this Country; and thence it was that it obtained the Name of *Syria Salutifera.* The scent of the Waters here is much like those of *Bath* in *England*, but not so strong, neither is the Taste so offensive. On the contrary, when they have run so far from the Fountain, as to become cold, they are very potable, and are the only Waters the Inhabitants use. But we, during our stay there, sent to a Fountain of very excellent Water, about an hour distant from the City.

On the East side likewise of the long Piazza stands, if I may use such an Expression, a Wood of Marble Pillars, some perfect, and others deprived of their beautiful Capitals; but so scattered and confused, that it is not possible to reduce them into any Order, so as to conjecture to what they anciently served. In one place are Eleven together in Square after this manner paved at the bottom with broad flat Stone, but without any Roof or Covering. And at a little distance from that stands the

The little Temple.

Ruins of a small Temple, which by the remains seems to have been for the Workmanship very curi-

curious: But the Roof is wholly gone, and the Walls very much defaced and conſumed with Time. Before the Entrance which looks to the South, is a Piazza ſupported by ſix Pillars, two on one Hand of the Door, and two on the other, and at each end one. And the Pedeſtals of thoſe in the Front have been filled with Inſcriptions, both in *Greek* and the other Language; but they are now ſo obliterated and worn out, as not to be Intelligible. The moſt perfect was this that follows.

ΜΑΛΕΝΤΟΝ ΚΑΙ ΑΓΡΙΠΠΑΝ ΙΑΡΑΙΟΥ ΤΟΥ ΡΑΑΙΟΥ ΓΡΑΜΜΑΤΕΑ ΓΕΝΟΜΕΝΟΝ ΤΟ ΔΕΥΤΕΡΟΝ ΕΠΙΔΗΜΙ[Α] ΘΕΟΥ ΑΔΡΙΑΝΟΥ ΑΛΙΜΜΑ ΠΑΡΑCΧΟΤΑ ΞΕΝΟΙCΤΕ ΚΑΙ ΠΟΛΕΙΤΑ[ΙC]..... And a little below were theſe ſtraggling Letters viſible.

ΕΝΗ.... Ν ΥΠΗΡΕΤΗCΑΝΤΑ ΤΗΤ.... CΤΡΑΤΕΥΜΑ ΤΟΥ... ΥΠΟ.... ΗΚΑΙ.....ΤΟΝ ΝΑΟΝ ΤΟΝ.... ΔΙΟC.... ΝΤωΤ.....,

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I ſhould have imagined the KAI to have been a Copulative, and the ſecond Name *Agrippa* diſtinct from the former, but that the Words following in the Singular Number, will not admit of ſuch a Conſtruction. The Perſon then in Memory of whom this Inſcription

was

was made, must have been named *Malentus Cægrippa*, who bearing such an Office as Scribe, or the like, in the Expedition of *Adrian* the Emperor, performed an Act of Publick Benificence and Generosity, both to Strangers and Citizens, denoted by the Word (c) ΑΛΙΜΜΑ, or ἄλειμμα, which signifies Unction. Perhaps he distributed amongst them Sweet Oyls, to be used in or after their Bathings. 'Tis pity what follows is so imperfect; and especially that we cannot find out the Date: For that might have directed us to the precise time of *Hadrian*'s Expedition into these Oriental Parts, where he made great Conquests, and enlarged the Bounds of the *Roman* Empire.

The Sepulchers.

But as great a Curiosity as any were their Sepulchers, being Square Towers, four or five Stories high, and standing on both sides of a hollow way, towards the North part of the City. They stretch out in length the space of a Mile, and perhaps formerly might extend a great way further. At our first view of them, as we entred the place, we could not conjecture what they were; some thought them the Steeples of ruined Churches, and were in hopes we should have found some

(c) *Plin. Secun. Ep. l.* 2. Tells us of one, who was accused of an Illegal Exaction of Money from a Province, *Titulo Unguentarii*; now what was in that case unjustly exacted, might be in this a Voluntary Donation, not of the Province to the Governour, but of a great Man to the People. Or else *Unguentarium* may be supposed to be a Donative, like *Clavarium* or *Culinarium*, used sometimes by the *Romans*.

foot-

footsteps of Christianity here. Others took them to have been Bastions, and part of the Old Fortifications, tho' there is not so much as any Foundation of a Wall to be seen. But when we came a Day or two after, more curiously to enquire into them, we quickly found their use. They were all of the same Form, but of different Splendor and Greatness, according to the Circumstances of their Founders. The first we viewed was entirely Marble; but is now wholly in Ruins, and nothing but a heap of broken Stones, among which we found the pieces of two Statues, one of a Man, and another of a Woman, cut in a sitting, or rather leaning posture; and the Heads and part of the Arms of both being broken off, but their Bodies remaining pretty entire; so that we had the Advantage of seeing their Habits, which appeared very Noble, but more approaching the *European* Fashion, than what is now in use in the East; which inclined me to believe they might be *Romans*. Upon broken pieces of Stone tumbled here and there, we found some as broken Inscriptions, but not affording any perfect Sense, they are not worth the Transcribing.

Many other Sepulchers there were, as much gone to decay as this, which therefore we past by, to go to two, which stood almost opposite to one another, and seemed most perfect of any, though not without marks of the *Turkish* Malice. They are two square Towers, rather larger than ordinary Steeples, and five Stories high, the outside being of common Stone, but the Partitions and Floors within of good Marble; and beautified too

with very lively Carvings and Paintings, and Figures both of Men and Women, as far as the Breaſt and Shoulders; but miſerably defac'd and broken. Under theſe Statues, or by their ſides, are in the unknown Character, the Names probably of the Perſons there buried, or by them repreſented; or elſe ſome other Memorials of them. We entred one of theſe by a Door on the South ſide, from which was a Walk croſs the whole Building juſt in the middle. But the Floor was broke up, and ſo gave us a ſight of a Vault below, divided after the ſame manner. The Spaces on each Hand were again ſub-divided into ſix Partitions by thick Walls, each Partition being capable of receiving the largeſt Corps: And piling them one above another, as their way appears to have been, each of thoſe Spaces might contain at leaſt ſix or ſeven Bodies. For the loweſt, ſecond and third Stories, thoſe Partitions were uniform, and altogether the ſame; ſave from the ſecond Floor, which anſwered the main Entrance, one Partition was reſerved for a Stair-Caſe. Higher than this, the Building, being ſomething contracted towards the top, would not afford ſpace for the continuation of the ſame Method: Therefore the two uppermoſt Rooms were not ſo parted, nor perhaps ever had any Bodies lain in them. Unleſs it was that of the Founder alone, whoſe Statue wrapt up in Funeral Apparel, and in a lying Poſture, is placed in a Nich, or rather Window in the Front of the Monument, ſo as to be viſible both

both within and without. Near to this Statue was the following Inſcription.

ΤΟ ΜΝΗΜΕΙΟΝ ƎΚΤΙCΑΝ
ΕΛΑΒΗΛΕC ΜΑΝΝΑΙΟC CΟΧΑΕΙC
ΜΑΛΧΟC ΟΥΑΒΑΛΛΑΘΟΥ ΤΟΥ
ΜΑΝΝΑΙΟΥ ΤΟΥ ΕΛΑΒΗΛΟΥ ΑΥΤω
ΚΑΙ ΥΙΟΙC ΕΤΟΥC ΔΙΥ Μ Η Ν Ο C
ΞΑΝΔΙΚΟΥ.

'Tis a little doubtful whether ΑΥΤω ſhould not rather be made ΑΥΤΘΙC; or elſe there there muſt be a Fault in the Verb, and all thoſe but the Names of one Perſon. The other Monument on the other ſide of the way is very much like this; only the Front and Entrance are towards the North, and 'tis not altogether ſo Polite, nor ſo well Painted. But the Carvings are as good, and it ſhews altogether as Stately and Magnificent as the former. Beſides, it has the Advantage in Age of a whole Century of Years: As appears from the Date of the following Inſcription. 'Tis placed above a Nich in the Front, adorned with handſom Borders and Corniſhes; the place, doubtleſs, of ſome Statue, and probably that of the Founder.

ΜΝΗΜΕΙΟΝ ΑΙωΝΙΟΝ ΓΕΡΑC
ωΚΟΔΟΜΗCΕΝ ΓΙΧΟC ΜΟΚΙΜΟΥ
ΤΟΥ ΚΑΙΛΚΙΑΛCΙCΟΥ ΤΟΥ ΜΑ.....
ΟΥ ΕΙCΤΕ ΕΑΥΤΟΝ ΚΑΙ ΥΙΟΥC ΚΑΙ
ΕΓΓΟΝΟΥC ΕΤΟΥC ΔΙΤ ΜΗΝΕΙ
ΞΑΝΔΙΚω.

This is the most Ancient Inscription I met with in *Tadmor*, the 314th. Year from the Death of *Alexander* the Great, preceding the Birth of our Saviour about Ten Years. The other also is between Twenty and Thirty Years before the Reign of *Hadrian*, and consequently before the *Romans* got footing here. And from these sumptuous Structures, and these costly *Mausolæa*, we may reasonably conclude, they were a Potent and Opulent People, before they became subject to the *Romans*, and were not obliged to them for their Greatness.

And now I believe I have wearied you sufficiently by leading you up and down the Ancient and Famous City of *Tadmor*, and giving you so dry an Account of our Employment there. After 4 Days stay we returned, not the way that we came, but proceeding Eastward towards the River *Euphrates*. In our way to which, the third Day, passing though a Village called *Tieve*, upon a Stone set wrong End upwards, in the midst of the Wall of the Mosch, we met with the following Inscription.

ΔΙΙ

ΔΙΙ ΜΕΓΙCΤω ΚΕΡΑΥΝΙω ΥΡΕΡ
CωΤΗΡΙΑC ΤΡΑ: ΑΔΡΙΑΝΟΥ CΕΒ...
ΤΟΥ ΚΥΡΙΟΥ ΑΓΑΘΑΝΛΕΛΟC
ΑΒΙΛΗΝΟC ΤΗC ΔΕΚΑΠΟΛΕΟC
ΤΗΝ ΚΑΜΑΡΑΝ ωΚΟΔΟΜΗCΕΝ
ΚΑΙ ΤΗΝ ΚΛΙΝΗ.... ΕΞ ΙΔΙωΝ
ΑΝΕΘΗΚΕΝ ΕΤΟΥC ΕΜΥ ΜΗΝΟC
ΛωΟΥ.

And under this was another in the same Language and Character we had seen at *Tadmor*; I was surprized to find such an Inscription in this Place, nor can any way guess how they should come by it: And the mention of *Decapolis* makes me still more in the Dark. If one might extend the Bounds of *Decapolis*, as some are said to have done, as far as *Cœlosyria*, and comprize under this Name again all *Syria*, *Phœnicia* only excepted, then need it not be brought from elsewhere, but first set up in this Village. But this will not be allowed by those who make *Decapolis* only a part of *Palestine*. The Matter of Fact it contains is only an Account of the Magnificence of this *Agathangelus Abilenus*, whoever he was; who for the safety of the Emperor *Hadrian*, erected at his own Charges, and Dedicated to *Jupiter* the Thunderer, a Royal Ban-

quetting-House, (for so I take (*d*) ΚΑΜΑΡΑ to signifie) and a Bed of State; for after ΚΑΙΝΗ there is doubtless a Letter omitted, and it ought to be ΚΑΙΝΗΝ. The Date 445 agrees to the Year of our Lord 123. which was the seventh of the Reign of *Hadrian.* And the Month ΛωΟC is our *August.*

Arsoffa. The next Day we past by the Ruins of a large Monastery of the *Maronites*, as I guess it to have been by an Inscription we met with upon the Capitals of several Marble Pillars, which supported the middle Isle of a handsome Church, which was to this effect.

† ΕΠΙ ΓΕΡΓΙΟ ΕΠΙΣΚ°. Τ῀ ΣΥΝΓΕΝ῀ ΜΑΡωΝΙ῀ Τ῀ ΧωΡΕΠΙΣΚ°.

From thence we past on, and came the same Night to *Euphrates*, and having travelled two Days on the Banks of that Famous River, we came to the Tents of the King of the *Arabs*, who had furnish'd us with a Guide for our Voyage. With him we remained two Nights, and in two Days Travel more came back safe to *Aleppo*, having been out in the whole just 18 Days.

(*d*) This Word I find both in *Tacitus* and *Strabo*, used for a kind of Ships or Boats, long, narrow, light, and capable of receiving 20, or at most 30 Men; but what they should do with Boats in an Inland Town, without either River or Lake near it, I cannot imagine. I rather adhere to the other signification.

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The Reverend and Learned Author of this Account, cannot with Justice be censured, if some Minute Particulars of the History of this Place, have escaped his Memory, being obliged to write without recourse to the Books proper for his purpose, which were not to be had in that Country. We have since procured a Curious Prospect of these Noble Ruins, taken on the Place; which, with some further Remarks thereon, are here Published.

An Extract of the Journals of two several Voyages of the English Merchants *of the Factory of* Aleppo, *to* Tadmor, *anciently call'd* Palmyra.

OUR Merchants of this worthy Factory, being generally Men of more than ordinary Birth and Education, have not been wanting (as the intervals of leisure from their gainful Traffick would permit) to make Voyages of Curiosity, to visit the celebrated Remains of Antiquity in those Parts, whereby the once flourishing State of the World, under the *Roman Empire*, is abundantly evinced. And being inform'd by the Natives, that the Ruins of the City of *Tadmor* were more considerable than any they had yet seen, they were tempted to enterprize this hazardous and painful Voyage over the *Desart*; but having been, by the perfidy of the *Arabs*, disappointed of their Desires in their first Attempt, they were obliged to defer their Curiosity, till they could better provide for their Security: whereof being assured, from the Confidence some of them had in the Friendship of *Assyne* then King of the *Arabs*, they adventured again, in the Year 1691, and had full liberty to visit, observe and transcribe what they pleased. What

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A View of the Ruines of Palmyra alias Tadmor, taken on the Southern Side.

What Account they there took, the Publick has already seen in our Last, since which, by the Favour of Mr. *Timothy Lanoy* and Mr. *Aaron Goodyear*, two very Eminent Merchants, who were both in the first Voyage, we have received not only the Draught of the Prospect of those noble Ruins, taken upon the Place, (of which we here give a Copy,) but also the Journals of both the Voyages; which, for the Satisfaction of the Curious, we have thought fit to Publish.

The first Voyage, Anno. 1678.

July 18. at Five in the Morning, we set out from *Aleppo*, being sixteen *English*; but with Servants and Mulettiers in all forty; and in four Hours and an half, travelling South by East, we arrived at a Village call'd *Casserabite*, being at the edge of the Desart, here we reposed the rest of that Day.

July 19. we rose at one in the Morning, and directed our Course S. S. E. over the Desart, for a Fountain call'd *Churraick*; but our Guide losing his Way, there being no Path, 'twas near Noon before we found it: which made us doubt of our Safety. This Well has no Signs near it to discover it by. Here we pitch'd our Tents, and refresh'd our Selves and Horses; and the Water being of a Purgative Quality, made us some Diversion. In our way, we found two *Arabs* with two Asses, one whereof carried Water and a little Bread, the other they rod on by turns; they had one Gun, with which they

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they ſhot Antelopes, the Bullet being a hard Stone broken round, and caſed with Lead; they had on the Palms of their Hands, Elbows, Knees and Feet, ſome Antelope-Skin tied, that they may be able to creep the better on the Ground, to Shoot; one of the Aſſes walking by as a Stalking-horſe, and the *Arab* imitating the Cry of the Gazel till he get within Shot: Theſe *Arabs* are called *Selebee*. At the Well came to us ſome *Arabs* that were making Aſhes of the ordinary ſort of Weeds call'd *Chuddraife*, *Ruggot* and *Cuttaff*; theſe they cut and dry, and putting them into a Pit, ſet Fire to them, and the Aſhes cake at the bottom. The Aſhes they carry to *Eglib* and *Tripoli*, to make Soap of: But the beſt ſort of Aſhes are made of the Weed *Shinon*, which grows about *Tadmor*, *Soukny*, *Tibe* and *Tarecca*; it grows like Broom in *England*, and in Shape reſembles Coral.

July 20. we roſe at four in the Morning, and Travelling two Hours E. S. E. we arrived at *Andrene*, where we found the Ruins of two or three Churches, and of a great Town lying in a large Plain; where having tarried about an Hour and an half, and taken ſome fragments of Greek Inſcriptions, which afforded no certain Senſe, but yet were evidently Chriſtian, we march'd again S. by E. and in about four Hours time came to a pleaſant Aqueduct call'd *Sheck-alal*; this Aqueduct is cut through the main Rock, for a great way from the Mountains; and where it ends, the *Arabs* have made a Garden, which afforded us Melons, Cucumbers, Purſlain, *&c.* In a Grott hard by, there dwelt

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an *Arab* with his Family; he had a dozen *Buffalo's*, which they used both for their Milk, and to Plow the Ground, Sowing both Wheat, and Barly: Hither the *Arabs* resort, when they have committed any Robbery about *Aleppo*, or *Hama*, and here they repose, and divide the Spoil.

July 21. we rose at four in the Morning, and riding two Hours South, we came to a Ruin call'd *Briadeen*; here we found the following Inscription on a Stone, good part in the Ground:

ΑΦΙΕΡωΘΗ ΑΑΙΛΥΝΔΙΟΥ ΤΟΥ ΑΜΦ ЄΤΟΥϹ
ΔΙΑ ΜΑΤЄΡΝΟΥ ΚΑ(Ι Π)ΑΠΠΟΥ ΚΑΙ ΜΑΙΚΟΥ ΚΝƟΤΜΝ
——— Υ ——— Ν

From hence going South-East, in four Hours more we came to a Well called *Costal* (which signifies a *Spring in Arab.)* Most part of our way through the Desart we were troubled with *Rat-holes* in great numbers, like Coney-boroughs, which by the sinking in of the Earth, very much incommoded our Horses and Mules. These *Rats* have at the ends of their Tails a bush of Hair, and the *Arabs* eat them all, excepting one part. From this Well we arose about four in the Afternoon, and began to ascend small Hills, covered with Trees, which, for the most part, were the small *Pistacho*'s which the *Arabs* pickle with Salt; but eaten green, are good to quench Thirst. We travelled on three Hours up the Hills, where we pitch'd that Night, having no other Water but what we carry'd with us; and at Night we had a small Shower

of

of Rain, a thing unusual in that Country at that time of the Year.

July 22. we rose by Two in the Morning, and Travelling E. S. E. we came by Eleven to a Well call'd *G'hor*, where we found it very Hot, and saw several prints of Horses Feet, so that we suspected some *Arabs* had newly past that way.

July 23. we rose by One in the Morning, and Travelling most East, we came to a large Plain, where we saw before us, on a high Mountain, a great Castle, call'd by the *Arabs Anture*. When we had travelled two or three Hours in this Plain, we espied an *Arab* driving towards us a Camel, with his Launce, so fast, that he came on a round Gallop, and we supposed him sent as a Spy: being come up to us, he told us he was of *Tadmor*, and that his Prince, the *Emir Melkam*, had that Day made Friendship with *Hamet Shideed* another Prince, and that together they had four hundred Men; so he kept us Company an Hour or two, and enquired of our *Muletters* if we were not *Turks* disguised, with intent to seize on *Melkam*; for we travelled with a *Bandiero*, the Impress being a *Hanjarr* or *Turkish* Dagger, and a Half-Moon. We told him we were *Franks*, which he could hardly believe, wondering that we travelled thus in the Desart, only out of Curiosity. Being come near to *Tadmor*, he went a little before us, and on a sudden run full speed towards the Ruins, we not endeavouring to hinder him. Our Guide told us he was gone to acquaint the *Arabs* who we were, and that we ought to suspect and prepare for the worst;

worst; so we dismounted twenty of our Servants, each having a long Gun, and Pistols at his Girdle, and placed them abreast before us: we following at a little distance behind, on Horse-back, with Carbines and Pistols. In this order we proceeded, and came to a most stately *Aqueduct*, which runs under Ground in a direct passage five Miles, and is covered with an Arch of Bastard Marble all the Way, and a Path on both sides the Channel for two Persons to walk abreast; the Channel it self being about an *English* Yard in breadth, and $\frac{3}{4}$ of a Yard in depth. At 20 Yards distance all the way are Ventiducts for the Air to pass, and the holes are surrounded with small Mounts of Earth to keep the Sand and Dust from falling down. We marched close by these Mounts, which might serve us for Defence, expecting every moment that the *Arabs* would come to Assail us, having the disadvantage of Sun and Wind in our Faces: wherefore we Travelled hard to gain an Eminence where we might Post our selves advantagiously, and stop and repose a little, to consider what we had to do. The *Arabs* finding us to come on with this Order and Resolution, thought not fit to adventure on us, so we gained the Hill, from whence we might discern these vast and noble Ruins, having a Plain like a Sea for greatness to the Southwards of it. Here having refresh'd our Men, we fetch'd a little Compass and descended by the foot of a Mountain, on which stands a great Castle, but uninhabited. Here two *Arabs* came to us with Lances, one being Chiah to *Melkam*,

and

and we sent two to meet them; they gave the *Salam alika*, and ours returned the *Alica salam*, and advancing to our Company, told us the *Emir* had understood of our coming, and had sent them to acquaint us that he was our Friend, and that all the Country was ours. We sent back with them our *Janizary* and a Servant to visit the Prince in his Tents, which were in a Garden. In the mean time we dismounted at a watering Place amidst the Ruins, but did not unload till our *Janizary* and Servant returned with the *Emir's Tescarr*, assuring us of Friendship and Protection, a Writing which the *Arabs* were never known to violate before. With them came also one that belonged to the *Sheck* of the Town, for whom we had Letters from *Useffe Aga* the *Emeen* of *Aleppo*. He desired us for greater Security to pitch our Tents under the Town Walls, which is in the Ruins of a great Palace, the Wall yet standing very high, the Town within but small, and the Houses excepting two or three no better than Hog-sties. So we pitched in a deep Sandy Ground where we found it exceeding hot. Here we waited till three of the Clock without eating any thing, expecting the *Sheck* should have presented us according to the usual Custom of the *Turks* to their Friends, and have given some answer to the Letters we brought him; but on the contrary we found by the gesture of the People, that we had Reason to suspect them. Hereupon two of our Company believing that the want of a present to the *Emir* was the cause thereof resolved to adventure

venture to give him a Visit, and taking the *Janizary* and one Servant, they carried him a Present of two pieces of Red Cloath, and four of Green, and several other things: Being come he welcomed them into his Tent, and placed the one on his right Hand and the other on his left. *Melkam* was a young Man, not above Five and Twenty, and well Featur'd, and a most Excellent Horse-man; *Hamet Shideed*, the other Prince, was more elderly, as about forty Years of Age, and was not in the Tent, but sat under a *Palm-Tree* near it. He treated them with *Coffee*, *Camel's-flesh* and *Dates*, and enquired of their Journey, and the Cause of their coming: They told him 'twas only Curiosity to see those Ruins; he said that formerly *Solomon Ibnel Doud* Built a City in that Place, which being destroyed, was Built again by a strange People, and he believed, that we understanding the Writing on the Pillars, came to seek after Treasure, he having but six Moons before found a Pot of *Corra Crusses*. After this he went out of the Tent, leaving them smoaking Tobacco, to the *Janizary* and Servant, and told them, that never till that Day any *Franks* had been at that Place, and that now we knew the way through the Desert, we might inform the *Turks* to their Ruin and Destruction, so that 'twould be convenient for them to destroy us all: But that we coming as Friends, he would only have 4000 Dollars as a Present, else he would hang them and the two *Franks* up, and go fight the rest. This Message being brought them, they wish'd they had excus'd themselves from this

this Embassy, and answered, they could say nothing to that Demand, not knowing our Minds, but if he would permit them to go and speak with the rest, they would return an Answer. Hearing this, he threatned present Death, but at length gave leave to our *Janizary* to carry us a Letter from them, wherein they shewed the danger they were in, and earnestly entreated us to redeem them, the Price set on them being 2000 Dollars, one half in Mony, the other half in Goods, as Swords, Cloaths, Tents, *&c.* which the *Emir* promised to estimate at their Worth.

This Letter amazed us mightily, and a little before it arrived, we understanding a little, and fearing more ill Treatment to our Friends, were getting ready to free them or die with them. The Garden where *Melkam* lay, was about half a Mile from the Tents, full of *Palm-Trees*, and had no Walls, but loose Stones piled up Breast high about them, so we designed to have gone suddenly and given two or three Volleys on them, e'er they could get to Horse; and the *Arab* know not how to Fight on Foot. And though they bragg'd they had 400 Men, we supposed 200 might be the most, and they not all Lances. But on receipt of this Letter, and the Servants telling us that they would certainly be cut off, if we endeavoured their Rescue, we began to examin what Moneys we had, Cloaths and other Trade, and found we could not near make up that Sum. In this Confusion came two *Arabs* to receive the things, and immediately Word was brought that the *Emir* would come and Visit us; we

sent

sent him Word, that if he came with more than two followers, we would not admit him: so he came with 2 Servants only; and in conclusion, we made him up in Money and Goods to the Value of 1500 Dollars. He valuing our Things as we pleased; his Design being not so much to compleat the Sum, as to take from us all we had. After this, about Sun Set, he returned us our two Friends, when the *Sheck* of the Town invited us to Lodge within the Town; which we found afterwards was with a design to have forced something from us: But we giving him to understand that the Emir had taken all already, and had left us only our Arms and the Cloaths on our Backs; which if they would have, they must Fight for: That Resolution daunted them, and away they went, promising us Barley for our Horses in the Morning. We kept good watch in the Night, and when Day broke, we began to consider how to clear our selves; we expected the Barly till Nine in the Morning, when it came, and the Emir himself came and gave us the good Morrow: We feared least they should pretend to stop some of us in the Gate-way, so we placed six of our Company to secure the Passage, 'till all the rest were got out, under pretence of taking an Inscription that was over the Gate. Being all got clear, we returned by the same way we came and arrived at *Aleppo July* 29. in the Morning. This *Melkam* told us, That if we had not submitted our selves to his Demands, he was resolved to Fight us after this Method: Loading 50 Camels with Baggs of

Sand, and making small holes in the Baggs for the Sand to drop out, he would drive these Camels abreast upon us before the Wind, that the Sand might blow in our Eyes, and we spending our Bullets on the Camels, might so be easily overthrown; we answered, that we believed he would not venture his Camels and Horses to such a Combat. He wondered extreamly when we talk'd of Shooting Birds flying, and Hares running.

This and other the like Violences used by this *Arab* Prince, made the *Bassa* of *Aleppo* resolve to destroy him; and not long after he cajolled him with the Hopes of being made King of the *Arabs*, and to draw him near the City, he vested and caressed some of his Followers: Which having its effect, the *Bassa* surprized him in his Tents by Night, and soon after he was put to Death: This those People were willing to believe the effect of their so abusing the *English*, and might much contribute to the Security and good Usage they found, that went the second time on this Expedition.

We had not time to view these Ruins by reason of this usage, though perhaps we might with safety. We only took one of the Inscriptions as we past by, which was thus.

CЄΠTIѠION OTOPOΔHN TON KPATICTON
ЄΠITPOΠON CЄBACTOT ΔOTKHNAPION
KAI AP.. AΠHTHN IOTΛIOC ATPHAIOC CANѠHC
ѠACCIANOT TOT Ѡ..ΛЄNAIOT IΠΠЄTC
POTѠAѠN TON ΦIΛON KAI ΠPOCTATHN
ЄTOTC HOΦ MHNЄI ΞANΔIKѠ.

where-

wherein the principal difference is in the Word ἀεραπήτην, which in the Account already Published is read ἀεράτελην, which seems to signifie some peculiar Officer of the *Syrians*, as *Ducenarius* of the *Latins*, which perhaps those skill'd in the Oriental Customs and Languages may be able to expound.

As far as we could conclude from our Journeys, and the Position of the Ways taken by two good Compasses, the Distance of *Tadmor* from *Aleppo* is about a 150 English Miles, and the Course S. S. E. or rather somewhat more Southerly, considering the Variation of the Compass, which is above a half a Point Westward in these Parts.

The second Voyage, Anno 1691.

We set out from *Aleppo* for *Tadmor* on *Michaelmas-day*, being in all, Masters and Servants, thirty Men, well armed, having obtained a Promise of Security from *Assyne*, then King of the *Arabs*, and one of his own People for a Guide. This Day our Road pointed S. b. E. and in four Hours we came to a Fountain call'd *Caphir-Abiad*, leaving Old *Aleppo* about an Hour distant on the right Hand: Here we made but a very short stay, but proceeded to a better Fountain at the foot of a very high Hill, cover'd with loose Stones, the Ruins of a Village called *Broeder*, of which there was not one House remaining; and dining here, we advanced in an Hour and a quarter more, in the Afternoon, through a fertile open Place, to a Place called *Emghir*, famous for the best

Wheat that is brought to *Aleppo.* This we made our first Stage; and mounting again in the Morning about five a Clock, in less than an Hour, past by an uninhabited Village, call'd *Urghee*, our Road pointing as before, through the fruitful Plain, even and pleasant; but when we came to ascend the Hills, where I reckon'd we entred the Desart, and were to take our leave of Mankind, at least of an inhabited Country for some Days, we had a troublesome Passage, over loose great Stones, without any appearance of a Road.

Our Guide had promised to conduct us through pleasant Groves and Forests; but no such thing appeared, unless we would bestow that Name upon low withered Shrubs that grew in the Way, only one Tree we saw, which was of good use to us, serving as a Land-mark; and when we were come up with it, being left at a little distance on the right Hand, we gain'd the Prospect of a remote ridge of Hills before us, and on the top of one of them an old Castle; this Castle, we were told, was known by the Name of *Gazar Ibn Wordan*; but what it anciently was, or in what Condition it is at present, I could not learn; therefore, not unwillingly, I turned my Eyes from it, to a little round Hill more on the left, by which we were to direct our Course, and about a quarter of an Hour from which stood a Sheck's House, call'd *Sheck Ailha*, where we were to bait, with a Well of Water by it, but such that we had but little *gusto* to taste, though it served our Horses: All the Country hereabouts

abouts is stor'd with *Antelopes*, and there is a barbarous sort of People there, that have hardly any thing else to live upon, but what of these they can kill; and Necessity has taught them to be no mean Artists in their way, for they lie down behind the Stones, and as the poor harmless Creature passes, shoot them; and though their Guns be very ordinary, exceeding heavy and thick, with Match-Locks, yet are they such excellent Marks-men, that they kill many. That Morning we had Travelled about five Hours to reach *Sheck Ailha*'s; yet finding nothing to invite our stay there, (though there were four or five Tombs there not ill made, according to the *Turkish* mode) about one a Clock we mounted again, bending to the S. E. or something more Easterly. In our way we had two remarkable Prospects, one on the right Hand, of the Ruins of an ancient City call'd *Andreen*, and sometimes *Londrine*, which we were told had been formerly inhabited by *Franks*, and that there were many Inscriptions there; but it was too far out of our way, and withal something too dangerous to, for us to take a view of them: The other, on the left Hand, was another Tree, not far from which our Guide assured us of good Water, where we designed to take up our Lodging; the hopes of the Water made us slight a Well we past by on the Road, at which afterwards we repented we had not stay'd; for when we came up with the Tree, from which we had declined a great way to the right, we found our Water still at a very great distance, and were constrained to take

new Directions by a white chalky Hill, almost as far as we could see, and yet not much beyond the Place which was to be our Stage; on therefore we proceeded till Sun-set, very weary, and almost without hope of our coming to Water that Night, though at the same time near dead with Thirst; and which the more supriz'd us, our Guide was advanced a great way before, out of our sight, upon what design we knew not, but at his return, we found it was only to assure himself better of the way, and in an Hours time more he brought us to the side of a Bog, call'd by the Name of *Zerga*, where, such as it was, we found Water enough, but it was neither palatable nor wholsome, neither did the Ground seem proper to Sleep upon; yet we were forced to be content, there being no removing thence that Night.

October 1. We departed from *Zerga*, about two Hours before Sun-rise, and as soon as it was light, had the Prospect of a very high Hill, which was to be the bounds of our Travel that Day. To this we made as directly as we could look, finding nothing in our way observable either to arrest our curiosity, or to slacken our Pace, except a multitude of Holes made in the sandy Earth, by Rats, Serpents, and other Animals, which render'd our Riding a little troublesome; as we had found it upon the same Account the Afternoon before. About two Hours short of our Stage, we were shewn three little round Hills lying to the right in a direct line, known by the Name of *Tenage*; where we were told there was good Water, and its for that reason

son only they deserve the notice of those that Travel through such a thirsty Desart. The Place to which we directed our Course was called *Esree*, where we arrived about eleven a Clock, and found to our great Satisfaction, that our Guide had not deceived us in his Promise of excellent Water: Here we could discern the Foundations of a spacious City, and a piece of a thick Wall, built of a chalky Stone, was standing: This we judged to be the remainder of a Castle situated on the side of the Hill, so as both to defend and command the City. On the top of the Hill, above the Castle, stands the Ruins of a Fabrick, in appearance very Ancient, built of very hard Stone, yet exceedingly worn by the Weather; 'tis of an oblong Figure, pointing near to the N. E. and S. W. with only one Door on the Easterly end, which was once adorned with extraordinary good Carvings, of which there are still some remains, but the greatest part is either worn away, or purposely defaced; and those marks of ancient Beauty that remain are very obscure, and difficultly discernable; the outside of the Walls is beautified with Pilasters quite round, with their Pedestals and Capitals regular and handsom; but the Roof is all fallen down, and within appears nothing which looks either great or beautiful. The Situation, and placing the Door, hinders one from conjecturing it to have been a Christian Oratory, or Chappel, and therefore in probability it must have been a Heathen Temple; and if so, then the piece of the Castle Wall being of a softer Stone, must be much more mo-

dern; the goodness of the Water brings the *Arabs* (who rove up and down the Desart) and the *Turk-men* frequently hither, which has occasion'd a great many Graves about the Temple; and some have had leisure, and, (which is more difficult to be imagin'd) skill enough to scratch in the Walls the first Letters of their Names, and many more in Arabick Characters, which we could make nothing of, no more than of an Arabick Inscription which lay hard by, but appeared not ancient.

October the 2d. We departed from *Esree*, about an Hour, or an Hour and an half after Midnight, and in six Hours and an half arrived at two Wells, the Water 18 Fathom and 2 Foot deep, known by the Name of *Imp malcha Giub:* Through the greatest part of this Stage we had a broad beaten Road, and where that was not discernible, we guided our selves by a ridge of chalky Hills, under which the Wells lay; the Water we found exceeding bad, and of so noisom a Scent, that we could not endure it so much as at our Noses; which made our Guide laugh at us, who told us, the *Arabs*, and even the King himself used to drink freely of it; which, I am sure, our Horses would not do, though they were under a necessity of drinking that or none: For our selves we had brought from *Esree* Water, sufficient for one Day at least. In our way hither we were shewn the true Plant which they burn for Soap-Ashes, which has no Leaves, but a soft juicy Stalk shooting into several Branches, and something resembling our Camphire,

phire, only it's more round than that; the Ashes likewise we saw, which were made not far from the Wells, which in burning run into Cakes, not much unlike the Cinders of a Forge, only they are heavier, and not so full of Pores, nor so hard as they are. In the Afternoon, we proceeded on our Voyage two Hours and an half, to a place called *Almyrrha*, passing rather between than over the Hills, though we had something of an ascent too; this we did to shorten our Stage the next Morning, for we were told beforehand we should find no Water upon those Mountains; so, for our Selves, we liv'd upon our old Stock, and our Horses were constrain'd to pass that Night without Water. Our Journy hitherto had been altogether Southerly, and but little varying to the Eastward of due South.

October the 3d. We mounted from *Almyrrha* between five and six in the Morning, making to the point of a high ridge of Mountains, through an uneven desart Way, frequently interrupted with Gutts and Channels, probably made by the descent of the Waters from the Hills, upon sudden Rains: We came to the ascent after about four Hours Travel, which we found not difficult; and when we were on the top, we had a pleasant Prospect of the Country, and what we rejoyced at most, we were shewn a little Hill, just behind which, we were told lay *Tadmor*. This Mountain was cover'd on both sides with great plenty of Turpentine-Trees, which was an Object very pleasing, having seen very few greens in our whole Journey: This Tree

grow

grows very thick and shady, and several of them we saw loaded with a vast abundance of small round Nut, the chief use whereof is to make Oil, though some eat them, and account them as great a Regalio as Pistaches; their outward Husk is green, and more Oily than that of Pistaches, and within a very thin Shell is contained a Kernel both in colour and relish very much resembling them; but those that eat them, seldom take the Pains to search for the Kernels, but eat Husk and Shell all together, which have no ungrateful Taste: From this Hill we had a tedious descent, and coming at the foot into a narrow Gut, winding this way and that between the Mountains, our Passage seemed very long, hot and tiresome; our want of Water however obliged us to proceed, whereof we now began to be in great necessity, especially for our Horses and Mules, who had none the Night before, nor none all that Day; with this we had hopes of being supplied two different ways; having had a shower of Rain the Night before, we hoped to have found Water standing in the hollows of the Rocks; but either the Rain had not reach'd so far, or not in such plenty as to fill those naturally hewed Cisterns: Our other expectation was from the Wells that were in the Road; but these our Guide advancing before and examining, met us with the unwelcome News, that they were all dried up, and the best Advice he could give us, was to pitch where we were, and content our selves with the remains of what we had brought two Days in our Vessels, till our Horses

Horses and Mules might be sent to a Fountain two Hours out of our way, and being watered there themselves, bring a fresh supply for us: This way, with some difficulty, we assented to, as more eligible, than weary as we were, to wander so far out of the Road, to have the same Ground to stage over again the next Morning: We resolved therefore to send our Guide, with one or two of our Servants, in search of the Water, and afterwards others with our Horses, while in the mean time we pitch'd our Tents, it being then about two a Clock in the Afternoon: As soon as they were gone, a small drizling Rain, which we had about half an Hour, encreased to a very plentiful Shower, which put us upon producing all the Vessels we had to catch it as it fell from the Heavens, or ran down the Skirts of our Tents, our Horses at the same time greedily drinking it from the Ground; but we might have spared our Pains, for in less than half an Hours time, our Camp was in a manner a-float, and we were surrounded with Water not only sufficient for us, but for an Army of 20000 Men; those hollow Gutts which we passed over without the least appearance of moisture, were, by the Cataracts which descended from the Mountains, become Rivers; and our Guide with those Servants we had sent out, that before rode over it dry, it being swoln to such a Torrent, were put to some difficulty to repass it; so plentifully was God pleased to provide for us in our greatest streight; and which encreases both the Wonder and Mercy, the next Morning, all this great

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quantity of Water was paſt away, ſo that in about two Hour's Riding we could hardly perceive that there had been any Rain at all. This memorable Place is known by the Name of *Al-Wiſhal.*

October the 4th. From *Al-Wiſhal* we proceeded for *Tadmor*, ſome of the Ruins of which we perſwaded our ſelves we could ſee the Day before; perhaps it might be the Caſtle, which is more than half an Hour's diſtance from the City; our way lay Southward, but the Gut in which we travelled would not permit us to keep a direct courſe: However, in about an Hour's Walk, we paſt by *Antor* Mountains (our Guide call'd them *Toul Antor)* through a Gut or Rent, both ſides of which ſo directly anſwered one to the other, they would tempt a Man to believe they were ſeparated by Art, for an entrance into the Country; but it muſt have been a work of prodigious Labour and Charges to have cut through ſuch vaſt Mountains: And if any one was ſo hardy as to attempt it, he certainly grew weary of his Undertaking; for the Ground is levelled but a very little way, and almoſt as ſoon as we were well got within the open ſpace, we were obliged to aſcend another Hill, and ſo our Road continued over Hills and Valleys interchangeably all the way. On the left Hand, ſome diſtance from the Road, we ſaw a *Sheck*'s Houſe on the top of a high Hill, which made a better ſhow than uſually thoſe Buildings do, but being aſſured by our Guide it was a modern Structure, and eager too to come to the principal Place we aim-

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ed at, we would not prolong our Stage so much as to turn out of the Road, to see more of it: So pressing still forwards, we had hardly proceeded four Hours, when we came to the brow of a Rocky Mountain, separated from that whereon stands the Castle of *Tadmor*, but by a narrow Valley: In which Hill, by the Way, appeared some Quarries of fine Stone, which probably might afford Materials to the curious Buildings in the City. Our Guide here (according to his accustomed Diligence) advanced some few Paces before us, and having espied three or four Country-Fellows driving Asses towards us, he caused us to make halt, to give them an opportunity to come nearer to us, resolving to speak with them, to know whether the Coast was clear, or if any of the Mountain *Arabs* were then at *Tadmor*, or not. After a little space, with our Arms in our Hands, we marched in as good order as the Way would permit, down a rocky and steep Precipice, into the Valley; and our Guide making greater speed than we could, gallop'd after the poor affrighted Country Fellows; who seeing such a Company unexpectedly descend the Hill, left their Asses, and fled towards the City with all possible speed: But they were soon overtaken, and brought back again to us; to whom they related the good News, that there was no Force at all in *Tadmor*, and that we might proceed with Courage, and see what we would there with all safety: Which News obtained them their Liberty to go again to their Asses, and we continued in our Way.

Ha-

Having tired our selves with roving from Ruin to Ruin, and romaging among old Stones, from which little Knowledge could be obtained; and more especially not thinking it safe to linger too long in a Place, where should the Mountain *Arabs* (who were Enemies to *Assyne Abasse*, our Friend) have Intelligence of us, they might either fall upon or endeavour to intercept us in our return; (for which reason also we had all along concealed our intended Course, under a pretence of proceeding forward to *Damascus.*) On *Thursday*, *October* 8. about half an Hour after four in the Morning, we departed from *Tadmor*, being very well satisfied with what we had seen, and glad to have escaped so dreaded a Place, without any Trouble or Pretences upon us; but else with some Regret, for having left a great many things behind, which deserved a more particular and curious Inspection. Our Road lay almost due East, or a little enclining to the North; and on the left Hand, a ridge of Hills stretched along for a great space, sometimes about half an Hour distant from the Road, and sometimes opening wider: These Hills, we were told, were stored with rich Veins of divers Minerals, and afforded all that vast quantity of Marble, the Remains whereof we had seen at *Tadmor*; and it was from a Fountain call'd *Abulfarras*, at the foot of one of them, they fetch out Water, which we drank there; the Inhabitants contenting themselves with that which runs from the Hot Springs. To the right Hand lay a vast barren Plain, perfectly bare, and hardly any thing green to be seen

seen therein, except it were a few Gourds which our Servants found on the side of a little rising-Ground, where there was no shew of any thing moist to feed them. Our Way being plain, we had the sight of *Tadmor*, especially the Castle, for above half our Stage, till we came to an old *Caphar* House. We made indeed a very short Days Journey, in the whole, finding a Fountain of excellent Water in about five Hours and a half's Riding; which, as it was a most welcom Refreshment to us in such a thirsty Desart, so it was the only good Water we met with till we came to *Euphrates*, which was not till the third Day from this Place. At this Fountain we pitch'd, near to which is a Village, but almost wholly ruined and deserted. 'Twas some time before any Body would be seen, for they were afraid of us; at length, three Men came out to our Tents, Spectacles of a miserable Poverty, occasion'd by their being frequently pillaged by the Mountain *Arabs*, and a great Duty they pay to *Assyne Abasse* their King, for his Protection: Three hundred Dollars they pay him Anually, when one would think the whole Village was not able to make up the Sum of one Hundred; yet being the remotest Place that was under his Jurisdiction, they often suffer by the Inroads of the other. The Name of the Place is *Yarecca*, a Name it received (as we were inform'd) from a Victory obtained there by the *Turks* over the *Mamalukes*.

October the 9th. From *Yarecca* we mounted early, and Travelling N. E. or near that Point, in seven Hours time arrived at *Souk-*

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ney. The Road we found much like what we had the Day before, lying over a barren Plain; only we had Hills on both sides, and sometimes closing within half an Hours riding one of the other. The Village has its Name from the Hot Waters, (for so the Word imports,) which are of the same Nature with those of *Tadmor*; herein they Bath frequently, the same little dirty Hole serving both for Men and Women; only they have so much Modesty remaining, that they have different Hours for one and the other. To say the Truth, 'twas the only mark of Modesty I could observe among them; in other respects they seemed a Confident, or rather Impudent Generation of People. Before we could pitch our Tents, they flock'd about us in multitudes, Men, Women, and Children; and of the last, many of them as naked as ever they came into the World, not so much as a Rag about them to cover them; and so numerous they appeared, that if we had reason to think *Tarecca* wanted Inhabitants, we had no less, to conclude *Soukney* over-stock'd. At this Place usually resides an Officer of *Assyne*'s, who is their Sub-Basha, or Governor: He whom we found there, was call'd *Dor*, of a good Family among the *Arabs*, to whom we made a Present; and he civilly return'd it in Barley for our Horses. Afterwards he came under our Tents, and invited us to an Entertainment; which, considering the Circumstances of the Place, was very Splendid, though it was nothing but *Pilaw* at last, a little diversify'd by the dressing; and, to speak truly, I judge we could

not

not have less than a Bushel of Rice set before us. His Palace, indeed was not very stately, there being few Cottages in *England* but might vie with it. To the Room wherein we were entertain'd, which, doubtless, was the best, if not the only one he had, we were forced to clamber, rather than ascend, by broken Steps made of Stone and Dirt. When we were got in, and commodiously seated after the *Turkish* Mode, it seemed large enough for about a dozen or fourteen People: At the upper end was a little space separated from the rest by a ridge made up of Earth, within which, I suppose, he slept. The Walls were mean; but the Roof much worse, having no other Covering but Faggots; so that certainly it could not be Proof against a Shower of Rain which fell that Night, and forced us out of our Tents, into an old ruinous *Cane*, for shelter: However, it served well enough for our Afternoons Collation; and we had come away with a good Opinion of the Gentleman's Civility, had he not afterwards endeavoured to make a Pretence upon us, and so would have forced us to pay dear for our Rice: He pretended to a Customary Duty of a Chequeen a Head of all *Franks* that past that Road; though probably neither he, nor his Grand-father before him, had ever seen a *Frank* there before. But when he understood by our Guide, that we were not so easily to be imposed upon; and withal, that we were *Assyne*'s Friends, and in our Way to his Tents; and especially our Treasurer a Person he very much esteemed, who therefore would be sure

to acquaint him with any Exaction or Injury offer'd us, his Mouth was quickly stop'd, and he grew so sensible of his Error, that he sent to excuse it, and presented our Treasurer with a Fan of Black Ostrich Feathers; and not only so, but in the Morning came himself, and begging Pardon, desired nothing might be be said of what had past, and so conducted us about an Hour on our way. This Village pays to *Assyne* fifteen hundreed Dollars *per Annum*.

October the 10th. Continuing our Voyage still to the N. E. or something more Easterly, we found it another pleasant and easie Stage to another Village call'd *Tiebe*, so called (as they say) from the goodness of the Water, the Word signifying *good:* But we found them not so over excellent; they had the Tast, and were doubtless tinctured with the same Mineral, with those of *Soukney* and *Tadmor*, though not so strong. But the Village it self made a better Shew than usual; and the People appear'd of something better Fashion, and more civiliz'd, than those we had left. It's pleasantly situated, and makes a good appearance as one comes up to it; the Prospect being helped by a well built Steeple, to which is now adjoyned their Mosch: But I am apt to believe it the remains of a Christian Church, being built with more Art and Beauty than you shall easily find in Turkish Fabricks: And there are also several Ruins about it, which speak it to have been a more famous Place than now it is. Into the Mosch we were permitted to enter, without any Disturbance. This Village lies in one of the

Roads

Roads from *Aleppo* to *Bagdatt*, and pays to *Assyne* an Annual Tribute of one thousand Dollars. From hence we mounted again in the Afternoon, and proceeded about two Hours and a half farther, to shorten our next Days Stage. Having travelled this Day, in all, about seven or eight Hours, the Place we pitch'd at was a Fountain, and known by the Name of *Alcome*; but neither Town nor House by it: neither was the Water fit to be Drank, being of the same nature with that of *Soukney*, and almost as warm.

October the 11th. From *Alcome* we rose about an Hour and an half after Midnight, our Guide groping out the way, by the help of the Stars, which now bended more to the North than formerly. As soon as it was light enough to look about us, we found our selves in a wild open Desart, the Ground, in some Places covered with a sort of Heath, and in others quite bare. Nor had we travelled long after the Sun was up, before, by the help of a rising Ground, we discovered *Arsoffa*, the Place whither we were tending, which gave us hopes we should quickly be there: But having a dry tiresome Plain to traverse, and the hot Sun causing our Mules a little to slacken their Pace, 'twas after ten a Clock before we reach'd it: And which was more vexatious still, finding no Water any where near, we were necessitated to proceed forward for the River *Euphrates*, which we found four Hours distant from hence. *Arsoffa*, or (as the *Arabs* call it) *Arsoffa Emir*, seems to be the remains of a Monastery, having no Town nor Village near it, and being

one continued Pile of Building of an oblong Figure, ſtretching long ways Eaſt and Weſt, and encloſing a very capacious Area: At a diſtance it makes a glittering ſhew, being built of *Gypſine Stone*, or Rock-Iſing-glaſs, reſembling Alabaſter, but not ſo hard; ſeveral Quarries of which we paſt by in our way to it. When the Sun ſhines upon it, it reflects the Beams ſo ſtrong, that they dazle the Eyes of the Spectators. Art or Accuracy in the Workmanſhip we found none; and but very little Carved Work, and that mean enough; nay, the very Cement they made uſe of, is but little better than Dirt; ſo that it's no great Wonder to ſee it in Ruins, though it has not the appearance of any great Antiquity. Round about were the little Apartments or Chambers for the Monks, built Arch-wiſe, only one Story above Ground; but underneath are ſeveral Cells or Vaults, larger than the Chambers, which perhaps might ſerve for their Schools, or Working-houſes. In the midſt of the Area ſtand the Ruins of ſeveral Buildings, ſome of which ſeem to have been Ciſterns for Water, and it may be the Bathing-Places: But the moſt remarkable was one, which probably was the Abbot's or Biſhop's Houſe, there having been ſomething more Pains beſtow'd upon it, than the reſt: And another, which was the Relicks of their Church. This was formerly no unhandſom Structure, being built in the form of our Churches, and diſtinguiſh'd into three Iſles, of which the middle one is ſupported by eighteen turned Marble Pillars, with Capitals upon them, not of

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Marble, but of a sort of Clay, and Cast into the shape they are in, but of a Colour exactly resembling the Pillar it self. That which perswades to believe them Cast, is a Greek Inscription to be seen on all of them; the Letters whereof are not made by Incision in the Stone, but seem to be stamped, standing out higher than the distance between them; and on one of them, by mistake, they are so placed, as to be read after the Oriental manner, from the right Hand to the left. The Words are these, with the Crucifix before, as follows:

✝ ΕΠΙ ΣΕΡΓΙΟΥ ΕΠΙΣΚΟ. ΤΟΥ ΣΥΝΓΕΝ ΜΑΡΩΝΙΟΥ ΤΟΥ ΧΩΡΕΠΙΣΚΟ.

From hence our Guide led us to the River, by the assistance of two little Hills, which are known by the Name of *Aff Dieu*, our way lying North, and a little bending to the East. The sight of the River was a very pleasing Prospect; and to our great comfort, we found the Water very clear, happening to be there before the Rains, and after the Snow-Waters (which swell and disturb it in the Summer-time) were all past: And our Happiness seemed the greater, having had so tedious and thirsty a Journey of at least fourteen Hours, and neither our Selves nor our Horses touch'd a drop of Water all Day. We pitch'd upon a Reach of the River, where it was not very broad, not being above half a Musket-shot over.

October the 12th. This Morning, about Sun-rise, we proceeded on our Voyage, keeping along the Banks of the River, which, for the most part, led us West and North-West: And here we had pleasant Travelling, having the River on the right Hand, and Hills of Marble or other fine Stone, on the left; and delightful Groves of Tamarisk, Mulberry, and other Trees to pass through. Here every thing about us lookt fresh and verdant, and we met frequently Men and Women passing on their Occasions, a thing to which (in our former Stages) we had not been accustomed. We had also a pleasing Prospect of the opposite Shore, and could see a great way into *Mesopotamia*, but could meet with no Convenience to cross the River, which we were very desirous to have done. There are no Places of Note remaining upon the River either on one side or the other, only on the farther side we saw an old Castle call'd *Giabar*, which made a good Shew, being situated on the top of a Hill, and both for that and the way of Building, very much resembling that of *Aleppo*, only that is the larger, and in the midst of a City; this less, and has neither Town nor Houses about it. On our side we past by a *Sheck*'s House call'd *Abul-Rarra*, and the Ruins of a Town a little farther, where there was a square Tower built of a very ordinary Brick, but pretty entire. After we had left these Ruins, we rested to bait, under the Shadow of a Rock, wherein were many Apartments and Conveniences cut to lodge in, which I suppose are made use of in the Winter by the People, who

who, during the Summer, pitch among the Trees by the River-side. In the Afternoon we continued our Journey as before, keeping always at a little distance from the River, till a little before Sun-set; when we came to a very convenient Place upon the Banks, where we took up our lodging for that Night, having travell'd between seven or eight Hours the whole Day.

October the 13th. This Day we had the same Satisfaction as the Day before, proceeding as near the River as the Road would permit; and having made a Stage of about six Hours, we rested under the shade of the Tamarisk Trees by the River side, hoping to have found conveniency to have croſt it, but we could not. In our Way we saw nothing observable but the Ruins of a City call'd *Baulas*, where the *Turks* had formerly a *Sangiack*; but now there is never an Inhabitant in the Place, nor House standing, but the Ruins of Houses, and an Octagonal Tower of a considerable height, *viz.* One hundred and seven Steps, and beautified on the outside with Flourishes and an Arabick Inscription round about: It's a handsome Structure, and probably the Work of the *Mamalukes*, since whose time little has been done to adorn, but abundance to destroy and waſt this Country. After Dinner, we mounted sooner than ordinary; becauſe hoping to reach the Tents of *Assyne*, we were unwilling it should be late when we arrived: yet we made it near Sun-set before we got to *Fay*, a Fountain by which he lay. We had travell'd still on the same Point N. W. with

the Prospect of the River the greater part of the Way; the nearest Reach thereof not being above an Hours Riding from the Fountain. On the Road we met with several *Bandera*'s of the *Emir*'s Soldiers, who knowing our Guide, and understanding we were going to him, gave us a very courteous *Salam*, who else, perhaps, might have treated us with another sort of Civility. The King's Tents spread over a large Plain, and took up so vast a Space, that though we had the advantage of a rising Ground, we could not see the uttermost extent of them. His own particular Tent was pretty near the middle of the rest, which were pitch'd about it, not in a circular manner, but stretching out in length as the Plain open'd, or for the better conveniency of a Current of Water, which from the Fountain ran through the midst of them. 'Twas not at all distinguishable from the rest, but by its bigness, and a little more Company about it, being all made of a sort of Hair-Cloth, which seemed hardly a defence against Rain or Sun: But certainly they must find otherwise, else their Necessity (they spending their Lives in such moveable Habitations) would have taught them to have contrived something better. It cannot well be doubted but they are descended from the old *Arabs Scenitæ*, they living just after the same manner, having no settled Abode, but remove from Fountain to Fountain, as they find Grass for their Sheep and Camels, and Water for them and themselves. They love to derive themselves from *Ismael* the Son of *Abraham*; and it may be they are descended from

from him, but I believe they would be hard put to't to prove their Pedigree.

As soon as we alighted, we were attended by the Officers of the *Emir*, and conducted to a very noble Tent built after the *Turkish* Mode, and pitch'd next to his own. Hither he sent to bid us welcome, and to enquire how we had past in our Voyage; and presently after we had a Repast of several Dishes of Meat set before us, to stay our Appetites till a more plentiful Supper could be got ready. But before Supper the King himself made us a Visit in Person, bidding us Welcome to *Fay*, and asking what we had seen in our Travels that pleas'd us? how we liked *Tadmor?* and whether we had found a Treasure there? For this Notion sticks in the Heads of these People, That the *Franks* go to see old Ruins, only because they there meet with Inscriptions which direct them to some hid Treasures. And therefore it's no unusal thing with them, when they find a Stone with an Inscription on one side, to turn that down to the Ground, that it might not be seen or read of any. But we assur'd him we went with no such Expectations, but only out of a desire to see the Place: Neither had we brought any thing away with us, but a piece of Porphyry Stone, which, upon his Request, we shew'd him. We let him see too, a kind of rude Draught which we had taken of the Place; which he seemed to like. He made his Visit the shorter, that he might not incommode us after our Journey; but desir'd us we would live after our own Pleasure and to our Satisfaction, and command freely

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whatever the Camp would afford; ordering some of his People constantly to attend upon us. When there was mention made of our Design to be gone the next Morning, he answer'd, It must not be; himself was invited the next Day, to a great Entertainment, by one of his *Grandees*, and we should accompany him: But the Day following, he would go out with us, and Hunt part of our Way towards *Aleppo*. When Supper was brought in, there was Victuals enough for three times our Number: A large Dish of *Pilaw* in the middle, and twelve or fifteen Dishes of seveveral sorts of Meat about it, all dress'd after their manner, but exceeding good, and such as one might have fed heartily upon, had he not spoil'd his Appetite before. After we had Eat and Drank what we pleas'd, we rose up, and our Servants sat down in our Places; it being the Custom of the *Arabs*, and *Turks* too, from the Highest to the Meanest, all to eat at the same Table: The best sort sit down first, and so in order till all are satisfy'd, and then what remains is carry'd away. We might, if we had pleas'd, have lodg'd under the same Tent where we eat; but having Tents of our own pitch'd, some of our Company chose rather to retire thither, to avoid being disturbed by too many Visitants.

October the 14th. The next Morning, about ten a Clock, we were told that the King was gone to the Entertainment, and expected we should follow him; and that two young Camels were kill'd, to furnish this sumptuous Feast; which is the highest piece

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of Magnificence and Greatness to which these People, whose greatest Riches consist in Camels, can arrive. The Tent was about a Furlong from ours; so mounting our Horses, we rode to it, and found it surrounded with a numerous train of Guests, three hundred at least, of different Sort and Quality: It was very large of it self, and to be still more capacious, 'twas left open toward the West. The King was seated at the North-end, about the midst of the Tent, upon a Place raised with Cushions and Quilts, and Carpets before him: Neither did he sit cross-Legg'd, as all the rest of the Company were obliged to do, but in a leaning Posture. They seemed to observe an exact Order in their Places; and when any Person of Note enter'd, those that were near his Place, rose up and stood till he had seated himself. But the far greatest part could not come within the compass of the Ring, but stood behind the Backs of the rest, leaving a spacious *Area* vacant in the middle. When we entred, they made room for us on the King's left Hand, which here is esteem'd the more Honourable; where we sat down in the same Posture with those about us, cross Legg'd upon a thin Carpet. Before mid-day, a Carpet being spread in the middle of the Tent, our Dinner was brought in, being served up in large Wooden Bowls between two Men; and truly to my apprehension, Load enough for them. Of these great Platters there were about fifty or sixty in number, perhaps more, with a great many little ones, I mean, such as one Man was able to bring in, strew-

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ed here and there among them, and placed for a Border or Garnish round about the Table. In the middle of all was one of a larger size than all the rest, in which was the Camel's Bones, and a thin Broth in which they were boiled: The other greater ones seemed all filled with one and the same sort of Provision, a kind of Plumb-Broth, made of Rice, and the fleshy part of the Camel, with Currants and Spices, being of something a darker Colour than what is made in our Country. The lesser were, for the the most part, charged with Rice dress'd after several Modes, some of them having *Leben*, (a thick sour Milk) poured upon them. *Leben* is a thing in mighty Esteem in these Hot Countries, being very useful to quench Thirst: And truly we had need of it here; for I did not see a drop of any sort of Liquor, excepting a Dish of Coffee before Dinner, drank at this splendid Feast. Knives, Forks, Spoons, Trenchers, *&c.* are silly Impertient Things in the Esteem of the *Arabs*: However, we being known to make use of such things, had large Wooden Spoons laid before us. When the Table was thus plentifully furnish'd, the King arising from his Seat, went and sat down to that Dish that was directly before him; and so did the rest, as many as it would contain, which could not be much short of a hundred; and so without further Ceremony, they fell to thrusting their Hands into the Dishes, and Eating by Handfuls: Neither was there any occasion of Carving; only because those Dishes in the middle were too remote to

be reach'd, there was an Officer on purpose, who stepping in among them, and standing in the Spaces designedly left for that end, with a long Ladle in both his Hands, helpt any one according to their Desire. When the King had eaten what he thought fit, he rose up and wash'd, and retir'd back to his former Seat; and we also did the like; others being ready to fill our Places. Nor did we continue much longer under the Tent in that numerous Croud; for *Assyne* perceiving us a little uneasie, and supposing we had now sufficiently satisfy'd our Curiosity, though perhaps not our Appetites, told us we might take our Liberty, and if we thought fit retire to our Tents. This Favour we gladly accepted, and without Ceremony returned, several of his Attendants waiting upon us back. Here we had another Dinner set before us; and having some of our own Wine and Water to Drink with it, it went down better with us than the famous Camel-Feast. In the Evening, the King mounted to see the flight of a new Hawk, and stay'd Abroad very late, his Hawk flying away: But she was afterwards taken up by his Falconer; otherwise he had not been in a good Humour all that Night, being a Man that delights very much in Sport. After his return from Hawking, we went to Wait upon him at his own Tent, to return him Thanks for his most courteous and royal Reception of us, and to desire leave to depart the next Morning. Here we found him surrounded with the chiefest of his People; and being placed

ced again on his left Hand, he entertain'd us with a great deal of pleasant Discourse; and ask'd such Questions, as shew'd him to be a Man of extraordinary Capacity and Judgment. As for Learning, they have no such thing among them, and therefore it's not to be expected that he should be a Scholar: But were he not a Person of more than common Prudence and Understanding, he could never have managed that Wild and Unruly People as he has done, ever since his Advancement to the Throne; which must therefore have been the more difficult, because as he came to it by the Deposition of his Father (though not immediately) who now lives with him as a private Man, so has he never wanted Competitors. To his Father he pays a great deal of outward Respect, but is forced to keep a very watchful Eye over him. After about an Hours Discourse, we were dismiss'd.

October the 15th. In the Morning, *Assyne* not being at leisure to go a Hunting, we proceeded on our Voyage Homewards, with a great deal of Alacrity; and finding nothing remarkable in our Road, in about 3 Hours and an half arrived at *Seray*. And hence, after a short Repast, we continued our Journey to *Sherby* Fountain, which took us up about the like space of Time. Here we accounted our selves as good as at Home, being at a Place with which we were well acquainted, and to which several times in the Year some or other of our Nation usually resort, either for Antelope or Hog-hunting, according to their Season; nor had

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we hence above seven or eight Hours to *Aleppo.*

October the 16th. Getting up pretty early in the Morning, we resolved to Hunt the greatest part of our Way Home, as we did; and Dining at the famous *Round-Hill*, whereon has been spent by the *English* more Money than would purchase a noble Estate round about it, in the Afternoon we arrived safe at *Aleppo.*

Some

Some Account of the Ancient State of the City of Palmyra, *with short Remarks upon the Inscriptions found there. By* E. Halley.

THE City of *Tadmor*, whose Remains in Ruins do with so much evidence demonstrate the once happy Condition thereof, seems very well to be proved to be the same City which *Solomon* the great King of *Israel* is said to have founded under that Name in the *Desart*, both in 1 *Kings* 9. 18. and 2 *Chron.* 8. 16. in the Translation of which, the *Vulgar Latin Version*, said to be that of St. *Jerom*, has it, *Condidit Palmyram in Deserto.* And *Josephus* (in *lib.* 8. *Antiq. Jud.* wherein he treats of *Solomon* and his Acts) tell us, that he Built a City in the Desart, and called it *Thadamora*; and the *Syrians* at this Day (says he) call it by the same Name; but the *Greeks* name it *Palmyra.* The Name is therefore Greek, and consequently has no relation to the Latin *Palma*, and seems rather derived from Παλμυός or Πάλμυς, which *Hesychius* Interprets βασιλεὺς πατὴρ: or perhaps from Παλμύτης, which (according to the same Author) was an *Egyptian* God. Neither is the Word תדמר but תמר that in Hebrew signifies a *Palm-Tree.*

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History is silent as to the Fate and Circumstances of this City, during the great Revolutions in the several Empires of the East; but it may well be supposed, that so advanced a Garrison as this was, being above three hundred Miles from *Jerusalem*, continued not long in the Possession of the *Jews*, who immediately after *Solomon*, fell into Civil Dissention, and divided their Force: so that it is not to be doubted, but that it submitted to the *Babylonian* and *Persian* Monarchies, and afterwards to the *Macedonians* under *Alexander* and the *Seleucidæ*. But when the *Romans* got footing into these Parts, and the *Parthians* seemed to put a stop to their farther Conquests in the *East*, then was this City of *Palmyra*, by reason of its Situation, being a Frontier, and in the midst of a vast Sandy *Desart*, where Armies could not well subsist to reduce it by Force, courted and caressed by the contending Princes, and permitted to continue a Free State, a Mart or Staple for Trade, for the Convenience of both Empires, as is abundantly made out from the Words of *Appion* and *Pliny*.

Appian (*lib.* 5. *de Bellis Civil.*) tell us, that *M. Antonius*, after his Victory at *Philippi*, about forty Years before *Christ*, sent his Horse to Plunder the City of *Palmyra*, pretending only that they were not sufficiently in the *Roman* Interest. ὅτι Ρωμαίων ἢ Παρθυαίων ὄντες ἔφοιτων ἐς ἑκατέρας ὁπλέξιως ἔχον, and that being Merchants, they conveyed the *Indian* and *Arabian* Commodities by the way of *Persia* into the *Roman* Territories; though the true reason were their Riches: But the *Palmyrenes*

being informed of the Design, took care to prevent them, and so escaped Plunder: And this Attempt of *Antony*'s occasioned a Rupture between the two Empires. The Words of *Pliny* (*lib.* 5. *Nat. Hist.*) above an hundred Years after, do likewise testifie that this City then continued in the same Enjoyment of their Liberties. They being very much to the purpose, I thought fit to Copy them: *Palmyra Urbs nobilis situ, divitiis soli atque aquis amœnis, vasto undique ambitu arinis includit agros, ac velut terris exempta à rerum Natura; privata sorte inter duo imperia summa Romanorum Parthorumque, & prima in discordia semper utrinque cura.* Whereby it appears not only that it was a Common-wealth in the time of *Vespasian*; but the situation thereof is truly described, as it were an Island of fertile Land, surrounded with a Sea of barren Sands. Such Spots *Strabo* tells us were frequent in *Lybia*, and by the *Egyptians* were called *Abases*; whence possibly the Name of the *Abassyne* Nation is derived.

With these Advantages of Freedom, Neutrality and Trade, for near two Centuries, 'tis not strange that it acquired the State and Wealth answerable to the Magnificence of these noble Structures. But when the *Romans* under *Trajan* had made it appear, that there was no comparison between the Puissance of the *Parthians* and them, (*Trajan* having taken *Babylon* and *Ctesiphon* the then Seat of the *Parthian* Empire,) the *Palmyreni* were at length determined to Declare for the *Romans*; which they did, by submitting themselves to the Emperor *Adrian*, about the

the Year of Christ 130, when *Adrian* made his Progress through *Syria* into *Egypt*. And that Magnificent Emperor being highly delighted with the native Strength and Situation of the Place, was pleased to adorn and rebuild it: When, as 'tis likely, he bestowed on it the Privileges of a Colony *Juris Italici*, which it enjoyed (as *Ulpian* assures us.) And the Inhabitants of the City, in Gratitude, were willing to call themselves *Hadrianopolitæ*, ἐπικτιδέισης ἡ πόλεως ὑπὸ τῦ Αὐτοκράτορ (says *Stephanus.*) Nor is it unlikely that many of those Marble Pillars were the Gift of that Emperor, and particularly those of the Long *Porticus*; for that none of the Inscriptions are before that Date. And it was usual for the *Cæsars* to present Cities that had obliged them, with Marble Pillars to adorn their Publick Buildings. These here were not far to fetch, the Neighbouring Mountains affording *Marble-Quarries*: But the Magnitude of the *Porphyry* Columns is indeed very remarkable, considering how far those vast Stones must have been brought by Land-carriage to this Place; it being not known that any other Quarries yield it, except those of *Egypt*, which lie about mid-way between *Cairo* and *Siena*, between the *Nile* and the *Red-Sea*: The Stone being very valuable for its Colour and Hardness, and so that it rises in Blocks of any magnitude required; *Quantislibet molibus cædendis sufficiunt Lapidicinæ*, (*Plin. lib.* 36.) And it is a great mistake of those who suppose it fictitious.

From the time of *Adrian* to that of *Aurelian*, for about an hundred and forty Years,

this City continued to flouriſh and encreaſe in Wealth and Power, to that degree, that when the Emperor *Valerian* was taken Priſoner by *Sapores* King of *Perſia*, *Odænathus* one of the Lords of this Town (which Name occurs in ſeveral of theſe Inſcriptions) was able (whilſt *Gallienus* neglected his Duty both to his Father and Country) to bring a powerful Army into the Field, and to recover *Meſopotamia* from the *Perſians*, and to penetrate as far as their Capital City *Cteſiphon*. Thereby rendring ſo conſiderable Service to the *Roman* State, that *Gallienus* thought himſelf obliged to give him a ſhare in the Empire: Of which Action, *Trebellius Pollio* (in the Life of *Gallienus*) has theſe Words, *Laudatur ejus (Gallieni) optimum factum, qui, Odenatum participato Imperio Auguſtum vocavit, ejuſque monetam, qua Perſas captos traheret, cudi juſſit: quod & Senatus & Urbs & omnis ætas gratanter accepit.* The ſame in many Places ſpeaks of this *Odænathus* with great Reſpect; and mentioning his Death, he ſays, *Iratum fuiſſe Deum Reip. credo, qui interfecto Valeriano noluit Odenatum reſervare.* But by a ſtrange reverſe of Fortune, this Honour and Reſpect to *Odænathus* occaſioned the ſudden Ruin and Subverſion of the City. For he and his Son *Herodes* being murder'd by *Mæonius* their Kinſman, and dying with the Title of *Auguſtus*, his Wife *Zenobia*, in Right of her Son *Waballathus* then a Minor, pretended to take upon her the Government of the Eaſt, and did adminiſter it to admiration: And when ſoon after *Gallienus* was murder'd by his Soldiers, ſhe graſped the Govern-

Government of *Egypt*, and held it during the short Reign of the Emperor *Claudius Gothicus*. But *Aurelian* coming to the Imperial Dignity, would not suffer the Title of *Augustus* in this Family, tho' he was contented that they should hold under him as *Vice Cæsaris*; as plainly appears by the Latin Coins of *Aurelian* on the one side, and *Waballathus* (which Name is often found in these Inscriptions) on the other, with these Letters V. C. R. IM. OR, which *P. Harduin* has most judicously interpreted *Vice Cæsaris Rector Imperii Orientis*, but without the Title of *Cæsar* or *Augustus*, and with a Lawrel instead of a Diadem. But both *Waballathus* and *Zenobia* are stiled CЄBACTOI in the *Greek* Coins, made, 'tis probable, within their own Jurisdiction. Two of the *Latin* I have seen, and they are as described, excepting the Points.

But nothing less than a Participation of the Empire contenting *Zenobia*, and *Aurelian* persisting not to have it dismembred: He marched against her, and having in two Battles routed her Forces, he shut her up and Besieged her in *Palmyra*: And the Besieged finding that the great resistance they made, availed not against that resolute Emperor, they yielded the Town; and *Zenobia* flying with her Son, was pursued and taken: With which *Aurelian* being contented, spared the City, and leaving a small Garrison, march'd for *Rome* with this Captive Lady: But the Inhabitants believing he would not return, set up again for themselves, and (as *Vopiscus* has it) slew the Garrison he had left in the

Place. Which *Aurelian* understanding, tho' by this time he was gotten into *Europe*, with his usual fierceness, speedily returned; and collecting a sufficient Army by the way, he again took the City without any great Opposition, and put it to the Sword, with an uncommon Cruelty, as he himself confesses in a Letter extant in *Vopiscus*,) and delivered them to the Pillage of his Soldiers. And it is observable, that none of the Greek Inscriptions are after the date of this Calamity, which befel the City in or about the Year of *Christ* 272, as far as may be collected, after it had been nine or ten Years the Seat of the Empire of the East, not without Glory.

In this appears also the great utility of Coins to illustrate Matters of History; for by them alone 'tis made out, that there was such a Prince as *Waballathus*, *Vopiscus* singly mentioning him by the Name of *Balbatus*: And from the same Coins it appears, that *Odænathus* had the Title of *Augustus* four Years, and *Waballathus* six at least; and that the first Year of *Aurelian* was the fourth of *Waballathus*. And by the Testimony of *Pollio*, *Odænathus* was declared Emperor of the East, *Gallieno & Saturnino Coss.* which was *Anno Christi* 263, and died before *Gallienus*, but in the same Year, *viz. Anno* 267, which, by the Coins, was the first of *Waballathus*. He therefore immediately succeeded *Odænathus*, and was without doubt his Eldest Son by *Zenobia*, and not his Grandson the Son of *Herodes*, as some learned Men have supposed: For if *Zenobia* could not endure that *Herodes* Son

Son of *Odænathus* by a former Wife, should succeed his Father in prejudice to her Children, and for that reason was consenting to his Murther (as *Pollio* intimates in *Herodes* and *Mæonius*,) much less would she endure the Title of *Augustus* in the Son of *Herodes*, especially when her own Sons were, as 'tis probable, elder than such Grandson. So that 'tis most likely that *Herennianus* and *Timolaus*, whom *Pollio* reckons among his XXX Tyrants, might be the Younger Sons of *Zenobia*, on whom also, out of Motherly Affection, she might bestow the same Titles of Honour.

But it must be observed, that in the Greek Coins, this Prince's Name is usually written ΑΥΤ. ЄΡΜΙΑC ΟΥΑΒΑΛΛΑΘΟC ΑΘΗΝΟΥ (as *Tristan* says he found it upon several Medals,) but *Patin* has the last Word only ΑΘΗ. I should be glad to peruse some of these curious Coins, especially if found in or near *Palmyra*: but I am inclinable to believe that his true Name was *Æranes Waballathus* (as was one of his Progenitors, in Inscription *Pag.* 91.) though perhaps the remoter Cities of *Asia* and *Ionia* might by mistake write it *Hermias*. And 'tis probable that ΑΘΗΝ might be for the first Letters of the Name of ΟΔΗΝΑΘΟC, which in Syriack begun with an *Aleph*; and the Δ was with those People used instead of Θ, as we see the Month *Xanthicus*, written Ξανδικὸς in many of these Inscriptions, which doubtless was pronounced like D *blæsum* or the Saxon D.

Though this City were at that time so roughly treated by *Aurelian*, yet it is certain

that he did not burn it, or destroy the Buildings thereof: And though *Zosimus*, on this occasion, uses the Words τὴν πόλιν κατασκάψας, yet that seems only to relate to his demolishing the Walls and Defences of the Place; and that Emperors own Letter extant in *Vopiscus*, doth sufficiently shew that he spared the City it self, and that he took care to re-instate the beautiful Temple of the *Sun* that was there, which had been Plundered by his Soldiers. However, the Damage then sustained was never retrieved by the Inhabitants, and I do not find that ever this City made any figure in History after it: Yet the *Latin Inscription*, (Pag. 106.) seems to intimate, as if *Diocletian* had restored their Walls within thirty Years after. About the Year of Christ 400, it was the Head Quarters of the *Legio Prima Illyricorum*; and though *Stephanus* gives it no better Title than φρούριον, yet it appears to have been an Archbishop's See, under the Metropolitan of *Damascus*. To say in what Age, or from what Hand it received its final Overthrow, which reduced it to the miserable Condition it now appears in, there is no light in any of our Historians; but it is probable it perish'd long since, in the obscure Ages of the World, during the Wars of the *Saracen* Empire; and being burnt and desolated, it was never rebuilt; which occasions the Ruins to lie so entire, in a manner as they were left, neither being used to other Structures on the Place, nor worth carrying away, because of the great distance thereof from any other City.

As to the Geographical Site of *Palmyra*, *Ptolemy* places it in the Latitude of *Tripoly* on the Coast of *Syria*, and four Degrees more Easterly, *viz.*

Παλμύρα . οα, ς'. λδ.

and he makes it the Capital of sixteen Cities in *Syria Palmyrena*, whereof *Alalis*, *Danaba* and *Evaria* were afterwards *Bishops Sees*. *Pliny* places it CCIII Miles from the neareſt Coaſt of *Syria*, and CCCXXXVII from *Seleucia ad Tygrim* near *Bagdat*, (which Numbers are erroneously Printed 252 and 537 in most Editions, contrary to the Authority of the MSS.) *Josephus* places it one Days Journey from *Euphrates*, and six from *Babylon*; which must be understood of Horse-man's Journeys of about sixty Miles *per diem*, it being more than so much from this City to *Euphrates*. *Ptolemy* also mentions a River running by *Palmyra*, which did not appear to our Travellers, unless that Gut or Channel wherein they were overflowed by the Rain-Waters, were the Bed thereof; which may, possibly, run with a constant Stream in the Winter or times of much Rain: But this (as the Rivers of *Aleppo* and *Damascus* at this Day) is made by *Ptolomy* to have no *exit*; but to go off in *Vapour*, and to be imbibed by the thirsty Earth of these Desarts.

The *Æra* or Accompt of Years observed by the *Palmyreni* in these Inscriptions, is evidently that of *Seleucus*, call'd afterwards *Dhilcarnian* or *Bicornis* by the *Arabians*, and by them kept in use till above 900 Years of Christ

Christ (as appears by the Observations of *Albatani*, published in *Numb.* 204 of the *Philosoph. Transact.*) and not that of the Death of *Alexander*. This may be demonstrated from the Inscription (*Pag.* 101.) wherein *Alexander Severus* is stiled ΘЄOC; that is, after the Death and Consecration of that Emperor, or after the Year of our Lord 234; and from the Name of *Julius*, who, when this Inscription was put up, was *Præfectus Prætorio*, (and could be no other than *Julius Philippus Arabs* who might be esteemed by the *Palmyreni* as their Country-man,) it follows, that it was in the last Year of *Gordian* *Anno Christi* 242 or 243: And that Emperor being soon after Murder'd by the Treachery of this *Philip*, who succeeded him: And his Treason coming afterwards to light, 'tis not strange that his Name was purposely effaced in this Inscription. The Date thereof, *Anno* 554, shews the beginning of this Accompt 311 or 312 Years before Christ, co-incident with the *Æra* of *Seleucus*, which was likewise observed by several other Cities in the East.

I shall not undertake the part of a Critick on these Inscriptions, but chuse rather to leave them to the more professedly skilful in that part of Learning, and shall only make some few Remarks on them, such as occurred whilst they pass'd through my Hands.

1. That the more ancient of these Inscriptions dated before the Year 500, do no where make use of *Roman Prænomina*, which yet are very frequent in them that follow; particularly *Julius*, *Aurelius* and *Septimius*, taken

taken up by theſe People out of Reſpect to the Emperors that bore thoſe Names; and conſequently that *Septimius Odænathus* (the Inſcription of whoſe Tomb we have, *pag.* 91.) was moſt probably the ſame who was afterwards *Auguſtus*. That Name growing in uſe in the Reign of *Septimius Severus*, under whom or his Son *Caracalla* this *Odænathus* was certainly Born. And this Monument being erected by him whilſt he was yet a private Man; and he afterwards attaining the Imperial Dignity, it was neceſſary the Inſcription of his Tomb (which perhaps was that ſingle one that was all of Marble) ſhould be changed: Upon which occaſion this Stone might be brought back into the Town, and after its Deſtruction, be clapt up caſually over the little Gate-way where now it ſtands.

2. *Pag.* 100. ΚΑΤΕΛΘΟΝΤΕϹ ΕΙϹ ΟΛΟΓΕϹΙΑΔΑ ΕΜΠΟΡΟΙΑΝ ΕϹΤΗϹΑΝ: *Deſcendentes Vologeſiada Commericum ſtabiliverunt*, *Anno* 558, *ſive Anno Chriſti* 247. Whereby it appears, that this People having had their Trade interrupted by the Wars between the *Romans* and the *Perſians*, under *Gordian*; did now ſend an Embaſſy to the Court of *Sapores* King of the *Perſians*, to get it re-eſtabliſhed; which ſucceeded according to their Deſires. *Vologeſias* was a City built by *Vologeſes* King of the *Parthians* in the time of *Nero*, on the *Euphrates* below *Babylon*. *Ptolemy* calls it Οὐολογεσιάς; *Stephanus*, Βολογεσιὰς; *Ammianus Vologeſſia*; and *Pliny* lib. 6. *Vologeſocirta*.

3. *Pag.* 101. ΚΑΙ ΟΥΚΟΝΙϹωΝΑ ΦΕΙΔΗϹΑΝΤΑ ΧΡΗΜΑΤωΝ. I ſubmit it to the Judgment of the

the Criticks, whether this faulty Place may not be amended by reading it ΟΥΚ ΟΙΚΕΙωΝ ΑΦΕΙΔΗCANTA, *&c.* as likewise whether ΔΙCΜΑΛΚΟΥ in the same Inscription may not be instead of ΜΑΛΛΟΥ ΤΟΥ ΜΑΛΚΟΥ, which is the Ingenious Conjecture of that excellent Grammarian Mr. *William Baxter.*

4. *Pag.* 102. *Septimium Vorodem Procuratorem Ducenarium Augusti &* ΑΡΟΑΠΕΤΗΝ. This Word, if *Greek*, is faultily transcribed; and in one Copy I have seen, the O is very small, as I suppose it on the Stone, which might occasion the transcribing thereof without it in the former Voyage (*Pag.* 130.) So that 'tis most probable that 'tis the remains of some other Letter almost worn out. I conjecture it to have been ΑΡΤΑΓΕΤΗΝ, Π being taken for Γ, and that this *Septimius* was *Præfectus Annonæ*, having the Care to see that the City were sufficiently provided with Bread; which was a most necessary Officer in a Place that must needs be furnish'd with Corn from Abroad. And this same *Septimius*, (in the Inscription, *Pag.* 105.) is stiled ..... ΕΟΔΟΤΗΝ ΤΗC ΜΗΤΡΟΚΟΛωΝΕΙΑC. *lege* ΚΡΕΟΔΟΤΗΝ, which should signifie that he was the Distributor of the Emperor's Munificence in Flesh to the People. These Inscriptions bear Date in *April*, *Anno Dom.* 267. not long before the Death of *Odanathus*, who is herein stiled CΕΒΑCΤΟC: and 'tis not improbable but he might institute such a Custom, as at the Publick Charge, to give the People a Largess in Flesh on particular Days, to reconcile them to the Dominion of their Fellow-Citizen. This is certain, that *Au-*

relian

relian first instituted such a Custom of giving Flesh at *Rome*: The Words of *Vopiscus* are, *Idem Aurelianus & porcinam carnem populo Romano distribuit, quæ hodieque dividitur*; which Custom continued till the time of *Constantine*, when (according to *Zosimus*) one *Lucian*, who had this Office of distributing Swines Flesh at *Rome*, had Interest enough among the People to set up *Maxentius* for Emperor; and *Salmasius* assures us, that it was not discontinued till the time of *Heraclius*. It will not therefore seem strange, if I suppose *Aurelian* might find that Custom at *Palmyra*, and at his return from thence institute the like at *Rome*.

I am enclined to believe, that not only those two Inscriptions, *Pag.* 102, and the last of *Pag.* 103, but also that of *Pag.* 106, were in Honour of the same *Septimius Vorodes* who seems to have been a great Favourite of *Odænathus*, and was without doubt respected by the *Romans* on that account, whom I conclude to have effaced all the Memorials of *Zenobia* and *Waballathus*, insomuch that no one appears, among those many taken, that was set up during the six Years they reigned. The Name *Vorodes* seems the same with *Orodes*, which was the Name of the King of the *Parthians* that slew *Crassus*: and the *Persians* having, about forty Years before, expelled the Race of the *Arsacidæ*, 'tis not improbable but the Remains of that Royal Family might fly for Succour to *Palmyra*, and this *Vorodes* might be one of them.

5. In two other Copies of these Inscriptions; the first of *pag.* 104. is read, Σεπτίμιον Αἰεβ-

Αἰφήλιω Ὀδαινάθῳ, and not Ὀδαινόθῳ as in the first Copy, and perhaps ought rather to be Ὀδαίναθον, as being the Inscription under a Statue of the same *Odænathus*, who is here, as well as on his Tomb, stiled *Illustrissimus Patricius*, but without a Date.

6. ΥΠΟ ΙΑΡΙΒωΛΟΥ ΘΕΟΥ (*pag.* 101. & 109.) It cannot well be doubted but that this *Deus Jaribolus* is the same with what *Gruter* (*pag.* 86.) and *Spon* (in the first of his Inscriptions) reads ΑΓΛΙΒωΛω. By the Figure of the Idol extant in *Spon*, it appears that this God was made with the Moon upon his Shoulders, and consequently was the *Deus Lunus* worshipped by the *Syrians*, whose Name, in the Language of that Country, could not be better expressed than by *Jarehbol* ירח ביעל *Dominus Lunus*. Whence I am induced to believe, that *Gruter* mistook it ΑΓΛΙΒωΛω for ΑΓΑΙΒωΛω, the I in the beginning, and the lower part of the round stroke of the P, being effaced, so as to pass for Γ. I have taken care to have the Stone purposely viewed, as also to get from thence the exact Figure of the *Syrian* or *Palmyrene* Characters thereon, wherein there is an irreconcilable difference between *Spon* and *Gruter*. By the help of these, compared with two others taken at *Palmyra*, which I have by me, (they being all very near the same Date,) I hope we may be able, one Day, to make out the *Palmyrene* Alphabet: But it were to be wish'd our Travellers had transcribed them with more Curiosity, and taken more of them.

By the way, it is remarkable, that the Person who dedicated this Monument, in *Gruter* and

and *Spon*, is stiled Λ. ΑΥΡ. ΗΛΙΟΔωΡΟC: and the same Name occurs in a broken Inscription which Mr. *Hallifax* omitted in his Letter to Dr. *Bernard*, as being too imperfect. It stood on the right Hand of the entrance to the little Temple described *pag.* 110. and was thus.,

ΛΟΥΚΙΟΥ ΑΥΡΗ[ΛΙ]ΟΥ ----- ΗΛΙΟΔωΡΟΥ ΤΟΥ.

And after a Blank of three lines all worn out except one single O, there followed,

[ΤЄΙ]ΜΗC ΧΑΡΙΝ ЄΤΟΥC------- ΜΗΝΟC [ΑΠ] ЄΛΛΑΙ[ΟΥ] And that imperfect one in *pag.* 104. seems to have relation to the same Name.

7. *Pag.* 111. ΜΑΛЄΝΤΟΝ ΚΑΙ ΑΓΡΙΠΠΑΝ *lege* ΜΑΛΗΝ ΤΟΝ ΚΑΙ ΑΓΡΙΠΠΑΝ, it being written ΜΑΛΗΝΤΟΝ, with H in the two other Copies I have seen, whereby the Sence is cleared.

8. *Pag.* 117. ΑΓΑΘΑΝΓЄΛΟC ΑΒΙΛΗΝΟC ΤΗC ΔЄΚΑΠΟΛЄΟC, *Agathangelus, Abilenus, Decapolitanus, Patronymice.* There were in these Parts two Cities known by the Name of *Abila*; to distinguish which, the one was called *Abila Lysaniæ*, from the Name of the Tetrarch: St. *Luke*, ch. 3. 1. and is placed by *Ptolemy* (in his *Cæloſyria*) about mid-way between *Damascus* and *Heliopolis:* The other in *Judæa*, called *Abila ad Jordanem*, described by *Josephus* in many Places, to lie over-against *Jericho*, near the *Dead-Sea.* *Decapolis* was so called from its Ten Cities, enumerated by *Pliny* (*lib.* 5. 18.) And with them he reckons up, among others, the *Tetrarchy* of *Abila*, in the same *Decapolis:* Which demonstrates the

Abila

Abila Decapolis and *Abila Lysaniæ* to be the same Place. And tho' it cannot be denied, but that some of *Pliny*'s Ten Cities are not far distant from that near *Jordan*; yet it doth not appear that ever this other had the Title of a *Tetrarchy*. Here it is to be observed, that what *Pliny* calls *Decapolis*, *Ptolemy* makes his *Cæle Syria*; and the *Cæle Syria* of *Pliny*, is that part of *Syria* about *Aleppo*, formerly call'd *Chalcidene*, *Cyrrhistice*, &c.

What this Town of *Teibe* was anciently call'd, is not so easily conjectured: But if the Numbers of *Ptolemy* may be confided in, it is very near the Situation of a City he calls *Oriza*; and perhaps his *Adada* may be our *Soukney*, and his *Rhæsapha* what is now called *Arsoffa*.

It is taken for granted, that Old *Aleppo* was anciently the City of *Berrhæa*, and there wants not ancient Testimony to prove it; which being granted, I think I may without scruple conclude, that *Andrene* (*pag.* 122. and 133.) is the Ruins of the City of *Androna*; and *Esree* (*pag.* 135.) that of *Seriane*, both mentioned in the Itinarary of *Antoninus*, in the Journey *à Dolicâ Seriane*. But this whole Country is laid about half a Degree more Southerly than it ought, by *Ptolemy*, who places *Berrhæa* in Lat. 36 *deg.* For the Meridian Altitude of the Tropical Sun at *Aleppo* is found there but 77 *deg.* whence the Latitude 36 *deg.* 30 *min.* as it was observed, *Anno* 1680. by three several Quadrants, in the presence of a curious Gentleman, to whom I am obliged for this Communication.

By

By the same Observation a much greater Error is amended in the Latitude of *Aleppo*, in the *Rudolfine* Tables of *Kepler*, who supposes *Aleppo* to have been the ancient *Antiochia ad Taurum*, and accordingly places it Lat. 37. *deg.* 20 *min.* wherein he is followed by *Bullialdus* and others; and several Maps have copied the Mistake. But a much greater use of it is, that thereby we are assured, that the City of *Aracta*, wherein *Albatani* made the Observations we have Publish'd in the *Philosoph. Transact. Numb.* 204. was, without doubt, the same which is now called *Racca* on the *Euphrates*; of which Town an Account may be seen in *Rauwolf*'s Voyages, and which was not many Miles below the Place where our Travellers first came on the River: And if *Arecca*, in the Language of this Country, relates to Victory (as is said in *pag.* 143.) it was, doubtless, anciently the City *Nicephorion*, built by *Alexander* the Great; with which the Situation exactly agrees. The Latitude thereof was observed by that *Albatani* with great accurateness, about eight hundred Years since; and therefore I recommended it to all that are curious of such Matters, to endeavour to get some good Observation made at this Place, to determin the Height of the Pole there, thereby to decide the Controversie, whether there hath really been any Change in the Axis of the Earth, in so long an Interval; which some great Authors of late, have been willing to suppose. And if any curious Traveller, or Merchant residing there, would please to observe, with due care, the Phases of the Moons Eclipses at *Bagdat*, *Aleppo* and *Alexan-*

dria, thereby to determin their Longitudes, they could not do the Science of Astronomy a greater Service: For in and near these Places were made all the Observations whereby the middle Motions of the Sun and Moon are limited: And I could then pronounce in what Proportion the Moon's Motion does Accelerate; which that it does, I think I can demonstrate, and shall (God willing) one Day, make it appear to the Publick.

The *Philosophical Reader* is desired to excuse our breaking in upon the Subject of these Tracts, by intermixing Historical and Philological Matters, as also our exceeding the Bounds of an Extract: But we hope the Curiosity of the Subject, joyned to the Desires of the *Royal Society*, may make an easie Apology suffice. There may be many other Instructive Remarks made thereon, which still deserve the Consideration of the Learned, and from such the Publick may yet expect a further Account.

A Voyage of the Emperour of China *into the Eastern* Tartary, *Anno.* 1682.

THe Emperour of *China* made a Voyage into Eastern *Tartary*, in the beginning of this Year 1682, after having appeased (by the Death of three Rebelious Kings) a Revolt, formed in some Provinces of the Empire: One of those revolted Princes, was Strangled in the Province, of which he had made himself Master: The second being brought to *Pekin* with the Principal Heads of his Faction, was cut in Pieces in the sight of the whole Court: The most Considerable among the *Mandarines*, acting with their own hands in this sad Execution, to Revenge upon this Rebel the Death of their Parents, which he had caust to be Cruelly Murdered.

The third which was the most Considerable, (and indeed the Chief of all the Revolt) had by a voluntary Death prevented his deserved Punishment, and so put an end to a War, which had lasted for Seven Years.

The Peace having been settled, by the Reestablishing in the Empire and all the Provinces, the Peaceable Injoyment of their Ancient Liberties: The Emperour departed the 23*d.* of *March* to go into the Province of *Leao-tum*, the Country of his Ancestors,

with a Design of visiting their Sepulchers, and (after having honoured them with the usual Ceremonies) of prosecuting his Journey into the Eastern *Tartary*: This Journey was was about 1100 *miles*, from *Pekin* to the end of it.

The Emperour took with him his eldest Son, a young Prince of ten years old, which had already been declared Heir of the Empire: The three principal Queens went also in this Journy, each in their guilded Chariot; the principal Kings also which compose this Empire, were accompanying with all the Grandees of the Court: And the most considerable *Mandarines* of all the Orders, who having all a very great Train of Attendants, and very numerous Equipage, made a Court about the Emperour of more then 70000 Persons.

It was his Will that I should accompany him in this Journey, and that I should be always near him, to the end I might make in his Presence, the Observations, necessary for knowing the disposition of the Heavens, the elevation of the Pole, the Magnetical Declinations of every Place, and for Measuring with Mathematical Instruments the height of the Mountains, and the distances of Places: He was well pleased also to be informed of what concerned Meteors, and many other Phisical and Mathematical Matters.

In so much, that he gave Order to an Officer to carry upon Horses such Instruments as I should have occasion to make use of, and recommended me to the Prince his Unkle, who is also his Father in Law, and the second

cond Perſon of the State, he is called by a *Chineſe* Name, which ſignifies an Aſſociate of the Empire: He gave charge to him to cauſe all things to be provided for me which were neceſſary for this Journey, which this Prince performed with a very particular goodneſs, cauſing me to Lodge always in his own Tent, and to eat at his Table.

The Emperour ordered that they ſhould give me Horſes of his own Stables, to the End I might the more eaſily Change in Riding, and ſome of thoſe were of them He Himſelf had Rid, which is a Mark of very extraordinary diſtinction. In this Journey we always went toward the North-eaſt: From *Pekin* to the Province of *Leao-tum*, the Way being about 300 Miles is pretty equal: In the Province it ſelf of *Leao-tum*, it is about 400 Miles, but much more unequal by Reaſon of the Mountains; from the Frontier of this Province to the City of *La*, or the River which the *Tartars* call *Songoro*, and the *Chinoiſe Sumhoa*, the way (which is about 400 Miles) is very difficult, being croſſed ſometimes by Mountains extreamly Steep, ſometimes by Valleys of extraordinary Depth, and through Deſert Plains, wherein for two or three Days March we met with nothing. The Mountains of this Country are Covered on the Eaſt ſide with great Oaks and old Forreſts, which have not been cut for ſome Ages.

All the Country which is beyond the Province of *Leao-tum* is exceeding Deſert where nothing is to be ſeen on all ſides but Mountains and Valleys, and Dens of *Bears*, *Tigers*

and other *Devouring* Beasts, you can scarce find a House, but only some *poor Reed Hutts*, upon the sides of some Brooks and Streams. All the Cities and *Burrow-towns* which I have seen in the Province of *Leao-tum*, and which are in very great Numbers are intirely ruined: One can see nothing thro' the whole Country, but old ruined Walls with Rubbel, Bricks and Stones. In the out-skirts of these Cities there have been of late some few Houses built, but without any order. Some of them made of Earth, others of the Rubbish of the old Buildings, the most part of them covered with Straw or Thatch, and but few with Tiles. There is now not the least Footsteps remaining of a great number of Towns and Villages which were here before the War. Because the petty King of the *Tartars*, who began to kindle this War having but a very small Army, caused the Inhabitants of those Places to take Arms, which Places he forthwith destroyed, that he might take from his Soldiers the hopes of ever returning again to their own *Homes*.

The Capital City of *Leao-tum*, which is called *Xin-Yam*, is a City very fair and pretty intire, it has as yet the Remains of an Antient *Palace*. It is (for as much as I was able to remark by divers Observations) of the Latitude of 41 *degrees* 56 *minutes*; that is to say, two *degrees* above *Pekin*, tho' hitherto both the *Europeans* and the *Chinese* have given that City the Latitude of 41 *degrees*. There is in that City no declination of the Magnetick Needle, as I have found by many reiterated Observations. The City of *Vla* which was almost the very Extream of our Journey,

ney, lies in 44 *degrees* and 20 *minutes*. The compaſs there declines from the South to the Weſt one *degree* 40 *minutes*.

But to reſume the Proſecution of our Journey, from *Pekin* to this Extream towards the Eaſt there is made a new Way, by which the Emperour can commodiouſly March with his Horſe, and the Queens in their Chariots. This Way is about 10 *foot* broad, and as even and ſtreight as could poſſibly be made; it is extended above 1000 *Miles*, it has a little Raiſing on each ſide of about a Foot high every where equal and perfectly Parallel to one another; and this Way was as neat, eſpecially when the Weather was fair, as a Floor where the Husbandmen beat out their Corn in the Field; there were alſo certain Perſons along this way, who only took care to Smoth and Cleanſe it. The Chriſtians have no where ſo great care of Sweeping their Streets and publick Places where the Holy Sacrament is to paſs in the Proceſſions, as theſe Infidels have of cleanſing the Ways, where their Kings and their Queens are to paſs, every time they go out of their Palaces.

There was made for their Return a way like the former, they plained or levelled the Mountains as far as they were able, they raiſed Bridges over the Rivers, and for ornamenting them, they had extended on each ſide of them a ſort of Mats upon which they had Painted divers Figures of Animals, which had the ſame effect with Tapeſtry Hangings, with which the Streets are uſually hung in Proceſſion.

The Emperor did very ſeldom make uſe of this Way, being almoſt always in Hunt-

ing: And when he accompanied the Queens he only Rode by the side of it, to the End that the great number of Horse which were in the Train that followed should not spoil it: He ordinarily Marched at the Head of this kind of Army. The Queens followed immediately in their Chariots, with their Train and their Equipage; they notwithstanding left some space between the King and themselves: After these Marched the Kings, the Grandees of the Court and the *Mandarines*, every one according to his Rank, behind these an infinity of Attendants, and other People on Horse-back brought up the Rear-guard.

As there was not one City upon all this Way, that could either Lodge so great a Multitude, or Furnish them with Provisions, and that the greatest Part of their Journey was through a Country very little Inhabited, so they were Necessitated to carry along with them all things that were Necessary for the Journey, and even Provisions of Victuals for three Months.

Upon this Account there were sent before by the Ways which were made on each side of the Emperors Way, an Infinity of Waggons, Cammels, Horses, and Mules for to carry the Baggage: Besides these the Emperor, the Kings and almost all the Grandees of the Court, had great numbers of Horses led, for the use of changing from time to time. I do not here reckon the Droves of Beefs, Sheep, and other Cattel, which they were obliged to have with them. And though this great Multitude of Men, Horses, and Droves,

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passed by a way at a good distance from that of the Emperor, yet it raised so horrible a Dust, that we always seemed to March in a cloud, and thence found it Difficult to distinguish those that Marched 15 or 20 Paces from us.

The March was so well regulated, that this Army Incamped every Night upon the sides of some River or Brook. 'Twas for this Reason that they caused the Tents and the Baggage necessary for this Incamping to set out very early in the Morning; and the Quarter-masters upon their first arrival, Marked the Ground most proper for the placing of the Emperors Tent, of the Queens, of the Kings, of the Grandees, of the Court, of the *Mandarines*, each according to his Dignity, and according to the Dignity he had in the *Chinese* Militia, which is divided into eight Orders or into eight Standards.

In the space of three Months we passed about 1000 *Miles*, advancing towards the North-east, and about as many in our return: In fine, we arrived at *Kam-Hay*, which is a Fort situated between the South Sea and the Mountains of the North: It is there where is the beginning of that so much Celebrated Wall, and which separates the Province of *Leao-tum* from that of *Pekely*; from whence it is extended very far on the side of the North over the tops of the highest Mountains. When we entred this Province, the Emperor, the Kings, and the Grandees of the Court, quitted the great Way of which we have hitherto spoken, to take that of the Mountains of the North, which are extended without Interruption towards

wards the North-East: There some Days were passed in Hunting, which was performed in this manner.

The Emperor chose 3000 Men of his Life-guard, Armed with Arrows and Javelings, and dispersed them some on this side some on that; so that they possest themselves of a great Circuit about the Mountains, which they Invironed on all Parts, which made a kind of Circle whose Diameter was at least 3000 *Paces*; then Marching to draw nearer together with equal Progress and without quitting their Range, what ever Obstacles they found in the way (the Emperor having joyned with them several of the Captains, and of the Grandees of the Court, for the better keeping of their Order) they Reduced this great Circle to another much less, which had about 300 *Paces* in the Diameter: So that all the Beasts which had been stayed within the first, found themselves taken in this last as in a Net: for that every one setting his Feet upon the Ground, they Locked themselves together so closely, that they left no meshing Place for them to make their Escape by. Then they Pursued them so Vigorously in this little Space, that the poor Creatures tired with the violence of their Coursing, came and fell down at the Feet of their Chasers, and suffered themselves to be taken without trouble. I saw taken in this Manner two or three Hundred Hares in less then one day, without counting an Infinite of Wolves and Foxes. I have seen the same thing divers times done in that part of *Tartary*, which is on the other side of the Province of *Leao-tum*, where I remember

member to have ſeen, among others, more than 1000 Deer ſo pent up by theſe ſort of Nets, which came to caſt themſelves into the Hands of the Hunters, having found no paſſage to ſave themſelves by: they kill'd alſo Bears, Boars, and more than 60 Tigers, but theſe are taken by other means, and with other Weapons.

The Emperor will'd that I ſhould be preſent at all theſe different Huntings, and he recommended to his Father in Law, in a moſt obliging Manner the having a particular care of me, and of giving charge that I ſhould not be expoſed to any danger in the Hunting of the Tigers, and the other fierce Beaſts; I was the only Perſon of all the *Mandarines* who was without Arms, and ſo near to the Emperor; though I made Light of the Fatigue during the time we were in our Journey, I found my ſelf ſo wearied every Evening when I got to my Tent, that I was not able to ſupport my Self; and I ſhould have diſpenſed with my ſelf divers times from following the Emperor, if my Friends had not counſel'd me to the contrary, and if I had not fear'd that he would have taken it ill if he ſhould have perceived it.

After having paſſed about 400 Miles in Hunting daily after this manner, we arrived at laſt at *Xyn-Yam*, the Capital City of the Province, where we ſtayed four Days.

The Inhabitants of *Coree* came to preſent to the Emperor a *Sea-Calf* which they had taken, the Emperor cauſed me to ſee it, and asked whither our *European* Books had ſpoken any thing of this Fiſh? I told him we had a

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Book in our Library at *Pekin* which had explain'd the Nature of it, and diſpatched preſently a Courrier to our Fathers at *Pekin*, who brought it me in a few Days: The Emperor was pleaſed to ſee that what was ſaid of this Fiſh in this Book, was agreeable to this which he had ſeen, and cauſed it to be carried back again to *Pekin* to be carefully preſerved.

During the ſtay which we made in this City, the Emperor with the Queens went to viſit the Sepulchers of his Anceſtors, which are not very far diſtant, from whence he ſent them back to *Xyn-Yam*, to continue his own Journey into the Eaſtern *Tartary*.

After ſeveral Days of Marching and Hunting, he arrived at *Kirin*, which is diſtant from *Xyn-Yam* 400 Miles: This City is built along the great River *Songoro* which takes its ſource from the Mountain *Cham-pe*, diſtant 400 Miles towards the South: This Mountain ſo Famous in the Eaſt for having been the Antient Seat of our *Tartars*, is always covered with Snow, from whence it had its Name, becauſe *Cham-pe* ſignifies the white Mountain.

So ſoon as the Emperor ſaw it, he alighted from his Horſe and fell on his Knees on the Bank of the River, and bowed Himſelf three times to the Ground to Salute it: After which, he cauſed himſelf to be carried upon a glorious Throne of Gold, and ſo made his Entry into the City: All the People ran in a throng before him, teſtifying by their Acclamations the Joy they had to ſee him. This Prince took great Pleaſure in thoſe Teſtimonies of their Affection; and that he might

might give them some Marks of his being very sensible of it, he was pleased to suffer himself to be seen by all, and forbid his Guards to hinder the People from approaching him, as they used to do at *Pekin*.

They make in this City Barks of a very particular manner: The Inhabitants keep always a great number of them ready fitted to Repulse the *Muscovites*, who come often into this River, to dispute the Fishing of Pearls. The Emperor reposed himself two Days, after which he Descended upon the River with some Lords, accompanied with more than 100 Boats, till he arrived at the City of *Vla*, which is the faireſt of all this Country, and which at other times hath been the Seat of the Empire of the *Tartars*.

A little below this City, which is at most about 32 *Miles* from *Kirin*, the River is very full of a certain Fish which resemble near enough the Plaice of *Europe*: and 'twas principally for the taking the Divertisement of Fishing, that the Emperor went to *Vla*; but the Rains coming on so suddainly, swelled the River so much, that all their Nets were broken and carried away, by the great Flood of those Land Waters: The Emperor notwithstanding staied 5 or 6 Days at *Vla*; but seeing the Rains were not at all discontinued, he was obliged to come back to *Kirin*, without having injoyed the Pleasure of Fishing: as we ascended the River, the Bark wherein I was with the Emperors Father in Law, was so indammaged by the agitation of the Waves, that we were constrained to go a Shore, and mount a Chariot drawn by one Ox, which

carried us very slowly to *Kirin*, the Rains not at all ceasing during our Journy.

In the Evening when the Emperor was entertained upon all these Adventures, he said Laughing, *the Fish have cheated us*; at length, after we had stayed two Days at *Kirin*, the Rains began to diminish, and we re-took our Way towards *Leao-tum*. I cannot here express the Pains and Fatigues these had caused us to undergo, during the whole Course of this Journy, by Reason of the Ways which the Rains had Spoiled, and rendred almost impassable: we went without staying over the Mountains and over the Vallies, and we could not pass but with extream Danger, the Brooks and Rivers which were swelled by the Floods and Inundations which ran from all Parts: the Bridges were either overturned by the Violence of the Currents, or all covered by the great overflowing of the Waters. There were made in divers Places great Collections of Water, and of Mud, that it was almost impossible to be drawn out of it. The Horses, Cammels, and other Beasts of Burthen, which carried the Baggage could not advance, but remained sticking in the Mud of the Marshes, or died of tireing upon the Ways. The Men were not at all less incommoded, and all were enfeebled for want of Victuals, and of Refreshments necessary for so great a Journy: Many of the Horsemen were obliged, either to lead their Horses on Foot, who were no longer able to carry them, or to rest in the middle of the Fields to suffer them to take Breath: And though the Quarter-masters and the Harbingers, spared not their Pains, nor

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for Wood (which they cut on all ſides) to fill with Faggots all the bad Paſſages: Yet notwithſtanding after the Horſes and Chariots, which took the Van early in the Morning had quite paſſed, it was impoſſible to paſs after them: The Emperor himſelf, with his Son, and all the great Lords of the Court, were obliged more than once, to Foot it over the Mud and the Marſhes, fearing to expoſe themſelves to greater danger, if they ſhould have paſſed them on Horſe-back.

When they came to Bridges, or thoſe other obſtructions all the Army ſtayed: And as ſoon as the Emperor was paſſed, with ſome of the moſt conſiderable Perſons, all the reſt came together in a Throng, and every one ſtriving to paſs firſt, many were tumbled over into the Water: Others taking Ways more about, found them more dangerous, falling into Sloughs and Bogs, out of which they could not Recover themſelves. In fine, there were ſo many Inconveniencies to be met with, in all the Ways of Eaſtern *Tartary*, that the old Officers who had followed the Court above 30 *Years*, ſaid they had never ſuffered ſo much in any Journy.

It was on thoſe Occaſions, that the Emperor more than once, gave me the Marks of a Reſpect altogether particular: the firſt Day that we put our Selves in the way for returning, we were ſtay'd in the Evening, by a Torrent ſo great and rapid, that 'twas impoſſible to Ford it: The Emperor having by chance found a little Boat, which could not hold above 4 Perſons at moſt, paſſed firſt with his Sons, and ſome of the Principal Kings followed: All the other Princes, Lords, and

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Mandarines, which the rest of the Army attended, (in the mean while) with Impatience the return of the Boat, to carry them to the other side of the Torrent, because the Night approached, and the Tents had long before passed: But the Emperor being come back to us in such another Boat as the former, demanded aloud where I was? and his Father in Law having presented me to him, he added, let him come in and Cross over with us: So we were the only Persons that passed with the Emperor; and all the rest stayed on the Bank, where they must pass the Night *under the open Heaven:* The same thing happened the next Day almost in the same manner. The Emperor at Noon meeting with a like rapid and swelled Torrent, gave order that the Boats should be made use of for Transporting the Tents, Packs, and other Baggage till the Evening; then willed that I should pass alone with him and some few of his Attendants, having left on the other side all the great Lords, who were necessitated to pass the Night there. The Emperors Father in Law himself, having asked if he should not pass with me, since I Lodged in his Tent and eat at his Table? this Prince answered him, that he shoud stay, and he himself would take Order to give me what was necessary.

After we had past, the Emperor sitting on the Bank-side, made me sit by him, with the two Sons of the two petty Western Kings, and the first *Colao* of *Tartary*, whom he distinguished on all Occasions.

As the Night was Fair, and the Heavens very Clear; he willed me to Name in the *Chi-*

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nese and *European* Languages, all the Constellations that then appeared above the Horizon, and he himself first named all those he already knew; then unfolding a small Map of the Heavens, which I had some Years since presented him, he put himself upon inquiring the Hour of the Night, by the Stars in the Meridian: Pleasing himself to shew to all the Knowledge he had acquired in these Sciences. All the Marks of his Favours which he so often gave me, even to the sending me to Eat from his own Table; these Marks I say were so Publick, and so Extraordinary; that the two Unkles of the Emperor, who bore the Titles of Associates of the Empire, being on their Return to *Pekin*, said that when the Emperor had some Regret or appeared somewhat Sad, he would Resume his ordinary Gaiety upon the sight of me.

I arrived at *Pekin* in perfect Health the *9th* day of *June* very late, though divers were detained in the Way by Distempers, or were returned from their Journy, Hurt and Lamed.

I say nothing of what we did for Religion in this Journy, having reserved that for a particular Relation, by which it will appear, that by the Grace of our Lord, the Favours we received at the Court of *China*, produced considerable Fruits for the Church, and did not take away the Cross from the Missionaries.

I shall here add the *Tartarean* Names, and the distance of every Place through which we passed in the Eastern *Tartary*, from the Capital of the Province of *Leao-tum* even to *Kirin*, according to the order of Days which we Spent in this Progress. A *Topogra-*

phick Chart may be made and inserted into the Map of the Province of *Leao-tum*, to be found in the Atlas of Father *Martin Martinius*, by changing only the *Latitudes* according to the Heights of the *Pole*, which we have before Specified.

I shall add one thing more which I Understood from the Inhabitants of *Ula*, to wit that *Nincrita* (which is a Place much Renowned in those Parts) is distant from *Ula* 700 *Chinese Stadia* (each of which is 360 *Geometrical Paces*) and that Imbarking at *Nincrita* upon the great River *Heleum*, into which the *Songoro*, and some other more considerable Rivers are discharged, and following the course of the River, which runs towards the North-East, or somewhat more to the North, they arrive in 40 Days Journy at the Eastern Sea, which is (as I believe) the Streight of *Anien*: I was told this by the General of the Militia which is at *Kirin*; and who had performed this Voyage himself.

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The Distances of the Places, thro' which we passed in the Eastern *Tartary.*

THe first Day we passed from *Xyn-Yam*, the Capital of the Province of *Leao-tum*, and we arrived at *Seao-Lysto*, so the Place is called in the *Chinese* Language.——95. *stadia.*
The 2day we arrived at *Cha-cay Angha.* 85. *stadia.*
The 3*d.* day at another Torrent of the same Name.——70. *stadia.*
The 4*th.* at *Kiaghuchen.*——50. *stadia.*
The 5*th.* at *Feyteri.*——80. *stadia.*
The 6*th.* at the Torrent of *Seipery.*——60. *stadia.*
The 7*th.* at the Torrent of *Ciam.*——60. *stadia.*
The 8*th.* at *Courou.*——50. *stadia.*
The 9*th.* at the Burrow of *Sape.*——40. *stadia.*
The 10*th.* at *Quaranny Pira.*——40. *stadia.*
The 11*th.* at *Elten eme Ambayaga.*——70. *stadia.*
The 12*th.* at *Ypatan.*——58. *stadia.*
The 13*th.* at *Suayen ny Pyra.*——60. *stadia.*
The 14*th.* at *Ylmen.*——70. *stadia.*
The 15*th.* at *Seuten.*——70. *stadia.*
The 16*th.* at the City of *Kirin.*——70. *stadia.*
1028.

All this Course being 1028 *Chinese* Stadia, contains 369 Miles (each) of 1000 Geometrical Paces; the *Chinese* Stadium containing as I mentioned before 360 Geometrical Paces.

A Voyage of the Emperor of China, *into the Western* Tartary, *in the Year*, 1683.

THe Emperor this Year, which is the 30*th.* of his Age, made a Voyage into the Western *Tartary*, together with the Queen his Grand-mother, which they call the Queen *Mother*; he departed the 16*th.* of *July*, in the Company of more than 60000 Men, and 100000 Horse. He positively resolved, that I, with one of the two Fathers that were at the Court of *Pekin*, the Choice of which he left to me, should follow him, I chose Father *Philip Grimaldi*; because he is the most known, and because he perfectly understood the *Mathematicks*.

Several Reasons prevailed with the Emperor to Enterprize this Journy. The first was, that he might keep his Militia during the Peace as well as in the Wars, in continual Exercise; and for this Reason it was, that after he had Establish'd a firm Peace in all the Quarters of this so vast an Empire; he recalled his best Troops hither out of every Province, and resolved in his Councel to make every Year Expeditions of this kind, in several Seasons, that by hunting of Deer, Boars, Bears, and Tigers, they might learn to overcome the Enemies of the Empire,

or

or at least to prevent the cooling of their Courage, or the degenerating from their Pristine Valour, by the Luxury of *China*, in a too long Repose.

In effect these kinds of Hunting had more of the shew of a Military Expedition, than of one for Divertisement, as I have already noted: The Emperor took in his Train, 100000 Horse, and above 60000 Men, all armed with Arrows and Cimiters, divided into Companies and Marching in Battel-Array after their Colours, with the sound of Drums and Trumpets: During their Hunting, they intirely invested the Mountains and Forrests, as if they had been Cities which they design'd to Beleaguer; following in this the manner of Hunting used by the Eastern *Tartars*, of which I have spoken in my last Letter. This Army had its Van-guard and Reer-guard, and its Main Body, its Right Wing and left Wing, was commanded by so many Generals and petty Kiugs. There were spent more then Seventy Days before they were on their March, in bringing together all the Ammunitions of the Army upon the Waggons, upon the Camels, upon the Horses, and upon the Mules, by reason of the Incommodious Ways. For in all the Western *Tartary* (I call it Western) not with Relation to *China*, which lieth in Respect of it Westward it self, but with respect of the Eastern *Tartary*) there is nothing to be found but Mountains, Rocks, and Vallies; there are neither Cities, Towns nor Villages, nor so much as any Houses. The Inhabitants Lodge under Tents, pitched on all sides in

the open Fields. They are for the most part Grasiers, and transport their Tents from one Vally to another, according as the Pastures are better. There they Pasture their Beefs, their Horses, and their Camels, they breed no Hogs, nor any of those other Animals, which elsewhere are fed in the Villages, as Poultry and Geese. But only of such as the Herbs, which an uncultivated Land doth Naturally produce, will serve to sustain. They pass their Life either in Hunting, or doing nothing. And as they neither sow nor cultivate the Earth, so they make no Harvest. They Live upon Milk, Cheese, and Flesh, and have a sort of Wine, not much unlike our Aqua-vitæ; with which they make their Feasts, and are often Drunk. In short they care for nought from Morning to Night, but to Drink and Eat; like the Beasts, and Droves which they Feed.

They are not without their Priests, which they call *Lamas*, for whom they have a singular Veneration, in which they differ from the Oriental *Tartars*; the most part of whom have no Religion, nor do they believe any God. For the rest both of the one and the other are Slaves, and wholy depend upon the will of their Masters, whose Religion and Manners they blindly follow: Like in this to their Droves, who go where they are lead, and not where they ought to go.

This part of *Tartary*, lies without the prodigious Wall of *China* about 1000 *Chinese Stadia*, that is to say more than 300 *European* Miles, and extends from the North-east towards the North.

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The Emperor Rides on Horſe-back, in the Head of his Army through theſe Deſert Places, and theſe Steep Mountains, and far from great Roads, expoſed all the Day to the Scorchings of the Sun, to the Rains, and to all the Injuries of the Air. Many of thoſe which had been in the laſt War, aſſured me, that they had not ſuffered ſo much during all that as during this Hunting. In ſo much that the Emperor, whoſe principal Aim it was to give his Forces a Breathing, performed effectually what he pretended.

The ſecond Reaſon he had of undertaking this Journy, was that he might keep the Weſtern *Tartars* in their Duty, and to prevent any pernitious Deſigns that might be formed againſt the States.

It was for this that he entred their Country with ſo great an Army, and with ſo great Preparations for War. Having carried along ſeveral great Guns, that he might cauſe them to be Diſcharged from time to time into the Vallies, and by the Noiſe and Fire which iſſued out of the Mouths of thoſe Dragons, which ſerved to Ornament them, he might caſt a Dread upon the Rout.

Beſides this great Retinue, he would yet be accompanied with all the Marks of Grandure, with which he was inviorned at the Court at *Pekin*. To wit, with a Multitude of Drums, Trumpets, Timbals, and other Muſical Inſtruments, which formed Conſorts During his ſitting at Table, when he entred the Pallace, or when he went out. He cauſed all theſe to March with him, that he might by this outward Pomp Aſtoniſh theſe *Barbar-*

barous People, to strike them with a Fear and Respect of his Imperial Majesty.

For the Empire of *China* never had any Enemies more to be feared than these Western *Tartars*; which beginning on the East of *China* incompass it with an almost infinite of People, and keep it as it were continually beleagured on the North and West sides thereof; and 'twas to make a Bulwork against their Incursions, that a *Chinese* Emperor in antient Times caused this great Wall to be Built, which separates *China* from their Country. I have passed it four times, and have considered it very attentively. And I can say without Hyperbolizing, that all the seven Wonders of the World put together, are not comparable to this Work. And all that Fame has spread concerning it among the *Europeans*, is far short of what I my self have seen.

Two things have more especially caused my Admiration. The first is, that in this long extent from the East to the West, it passes in several places not only through vast Champains, but also above the tops of exceeding high Mountains, upon which it is raised by little and little, and fortify'd at certain Intervals with great Towers; not distant the one from the other more than two flight Shot. At our return I had the Curiosity to measure the height of it in one place by means of an Instrument, and I found that it was in that Place 1037 Geometrical Feet above the Horison; in such sort that 'tis hard to comprehend how 'twas possible to elevate this enormous Bulwork to the height

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we ſaw it, in places dry and full of Mountains, whence they muſt be obliged to bring from a great diſtance with incredible Labour, the Water, Brick, Mortar, and all the Materials neceſſary for ſo great a Work.

The ſecond thing that ſurprized me was, that this Wall is not continued upon the ſame Line, but bent in divers places following the ſituation of the Mountains, in ſuch manner, that inſtead of one Wall, one may ſay that there are three, which Inviron all this great part of *China*.

After all, The Monarch which in our Days hath re-united the *Chineſe* and the *Tartars*, under one and the ſame Government, has done ſome things more for the advantage of the ſecurity of *China*, than the *Chineſe* Emperor that built the long Wall. For after having reduced the Weſtern *Tartars*, partly by Artifice, partly by force of Arms: He has obliged to go and remain at 300 Miles diſtance from the Wall of *China*; and in this Place he diſtributes to them Land and Paſtures, whilſt he has given their Country to other *Tartars*, his Subjects which have their Habitation there at preſent: Notwithſtanding which, theſe Weſtern *Tartars* are ſo powerful, that if they ſhould agree together, they might make themſelves Maſters of all *China*, and of the Eaſtern *Tartary*, even in the Face of the Oriental *Tartars*.

I have ſaid, that the *Tartarian* Monarch that conquered *China*, uſed an expedient for ſubduing the Weſtern *Tartars*. For one of his firſt Cares was to engage to his Intereſt by

by his Royal Bounties, and by demonſtration of a Singular Affection, the *Lamas* (or *Prieſts*) theſe Men having a great Repute about all thoſe of their Nation, eaſily perſwaded them to ſubmit to the Government of ſo great a Prince; and 'tis in conſideration of this Service done to the Eſtate, that the preſent Emperor looks upon theſe *Lamas* with a favourable Eye, that he beſtows Preſents on them; and that he makes uſe of them to keep the *Tartars* in the Obedience which they owe him: Tho' at the bottom he hath nothing but Diſ-eſteem for their Perſons, and looks upon them as a ſort of Ignorant Fellows, which have not the leaſt Tincture of the Sciences or commendable Arts, in which without doubt this Prince ſhews a Wiſe Policy, in ſo diſguiſing his true Sentiments, by theſe exterior Marks of Eſteem and Good-will.

He has divided this vaſtly extended Country into 48 Provinces, who have ſubmitted and are Tributary to him. From whence it comes to paſs, that the Emperor that Reigns at preſent in *China*, and in the one and the other *Tartary*, may juſtly be called the greateſt and moſt powerful Monarch of *Aſia*, having ſo many vaſt Eſtates under him, without being any where interrupted by the Territory of any Forreign Prince, and he alone being as the Soul which gives motion to all the Members of ſo vaſt a Body.

For after he had charged himſelf with the Government, he did not at all intruſt the Care to any of the *Colaos*, nor to any of the great Men of his Court. He has not at all

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suffered, that the Eunuchs of the Palace, or any of his Pages, or any of the young Lords that have been raised by him, should dispose of the least thing in his House, or should regulate any thing of themselves: Which appears very extraordinary; especially if we examin what Customs his Predecessors were wont to use.

He chastises with wonderful Equity the great Ones as well as the Inferiors; he deprives them of their Charges, and makes them descend from the Rank they held, proportioning always the Penalty to the heinousness of their Fault. He takes Cognisance of the Affairs which are transacted in the Royal Counsel, and in the other Tribunals, even to the causing them to render to him an exact account of the Judgments there given. In one Word, he of himself Disposes and Orders all things; and 'tis by reason of the absolute Authority which he hath thus acquired, that the greatest Lords of the Court, and Persons of the highest Quality in the Empire; even the Princes of the Blood, never appear in his Presence, but with a profound Respect.

But to what remains, the *Lamas* or *Tartarian* Priests, of whom we have spoken, are not only respected by the People, but also by the Lords and Princes of their Nation, who for Politick Ends testifie to them a great deal of Friendship: This makes us fear that the Christian Religion, will not find so easie an entrance into the Western *Tartary*. They are also very powerful upon the Mind of the Queen Mother, who is of their Country, and

who

who is at preſent Threeſcore and Ten Years Old; they are wont to tell her, that the Sect (of which ſhe makes Profeſſion) has no more declared Enemies than us. And 'tis a kind of Miracle, or at leaſt an extraordinary Protection of God, that notwithſtanding this, the Emperor, who has very much regard and reſpect for her, has not hitherto ceaſed to heap on us Graces and Honours, conſidering us after another manner than the *Lamas*.

During the Journey, as the Princes and the chief Officers of the Army went oftentimes to the Queen to attend at her Court; and that we alſo were advertiſed to do ſo likewiſe: We were willing firſt to conſult a Perſon of the Court, who loved us very much, and who ſpake for us to the Emperor in our Affairs. This Lord having enter'd the Princes Tent, told him what had paſſed, and preſently coming out again: *The Emperor* (ſaid he to us) *has given me to underſtand, that 'tis not at all neceſſary for you to attend the Queen as others do*; which made us to apprehend enough, that this Princeſs did not favour us.

The 3d Reaſon which the Emperor had for making this Journey, was for his Health: becauſe he knew by his Experience long enough, that when he is too long at *Pekin* without going Abroad, he cannot avoid his being attacked by ſeveral Diſtempers, which he prevents by means of theſe long Progreſſes. For during the whole time he never ſees any Woman; and that which is more ſurprizing, there appears not any one in all this great Army, except thoſe which are of

the

the Retinue of the Queen Mother: 'Tis yet also a Novelty that she has accompanyed the King this Year, it having not been practiced above once, when he took with him the three Queens as far as the Capital City of the Province of *Leao-tum*, to visit the Sepulchers of their Ancestors.

The Emperor and the Queen Mother pretend moreover by this Journey, to avoid the excessive Heats which are in *Pekin*, in the Summer during the Dog-days. For in this part of *Tartary*, there reigns during the Months of *July* and *August* so cold a Wind, especially in the Night, that 'tis necessary to put on thick Cloths and Furs. The Reason that may be assigned for this so extraordinary Cold, is that this Region is very much elevated and full of Mountains: There is one among the rest, upon which we continually ascended, for the space of 5 or 6 Days March. The Emperor being desirous to know how much it surmounted the Plains of *Pekin*, distant abont 300 Miles; at our return (after having measured the height of above a hundred Mountains that lay in our Road) we found that it had 3000 Geometrical Pace of Elevation, above the Sea that neareſtapproached *Pekin*.

The Salt Peter also with which these Countreys abound, may contribute to this great Cold, which is so violent, that in digging the Earth to three or four Foot deep, there are fetched out Clods all frozen, and peices of Ice.

Divers of the Petty Kings of the Western *Tartary*, came from all sides for 300 Miles, and

and some for 500 Miles, together with their Children, to salute the Emperor. These Princes, who for the most part know none but by their own natural Language, which is very different from that of the Eastern *Tartary*: Took regard of us, with Aspects and Gestures of a goodness very particular. There were some among them, who had made a Journey to *Pekin* to see the Court, and who had seen our Church.

One or two Days before we arrived at the Mountain which was the boundary of our Journey, we met a Petty King very aged, who returned from accompanying the Emperor, he seeing us stayed with all his Retinue, and enquired by his Interpreter, which of us was called *Nauboaij*; one of our Servants having made a sign that it was I, this Prince accosted me with a great deal of Civility, and told me that for a long time he had known my Name, and that he had desired to know me. He spoke also to Father *Grimaldi*, with the same marks of Affection. The favourable Entertainment he gave us in this Re-encounter, gave some Reason to hope that our Religion might find an easie Entrance to those Princes, particularly if care be taken to insinuate into the Minds of those Princes, by the means of the Mathematicks: Which if there should at any time be a design to penetrate into their Country, the most sure way for divers Reasons, (which I have not the leisure to explain here) will be to begin the entrance with the other *Tartars* more remote, which are not all Subjects of this Empire, from whom we may pass on to

these,

theſe, advancing by little and little towards *China*.

During the whole Journey, the Emperor has continued to give us ſingular Tokens of his good Will, ſhewing us Favours in the ſight of his Army, which he ſhewed to none beſides.

One time meeting us in a great Valley, where we were meaſuring the height and the diſtance of ſome Mountains, he made a ſtay with the whole Court; and calling to us form a great diſtance, he demanded of us in the *Chineſe* Language, *Hao-mo?* that is to ſay, are you well in Health? And then asked us ſeveral Queſtions in the *Tartarian* Language, concerning the heighth of theſe Mountains, to which I anſwered alſo in the ſame Language; after which, turning to the Lords that were about him, he diſcourſed with them concerning us in very obliging Expreſſions, as I learned the ſame Night from the Prince his Unkle, who was then by his ſide.

He teſtifyed alſo his Affection to us, by cauſing often Meat to be carry'd to our Tents from his own Table, willing alſo that on ſome Occaſions we ſhould eat in his; and every time he did us this Honour, he had a regard to our Days of Abſtinence, and of Faſting, ſending us only ſuch Meats as we could uſe.

The eldeſt Son of the Emperor, after the Example of his Father, gave us marks alſo of his Bounty, for having been conſtrained to ſtay more than 10 Days, by reaſon of a fall from his Horſe, by which he was hurt in his right Shoulder; and one part of the

Army

Army in which we were, having attended, whilst the Emperor with the other, continued his Hunting, he was not wanting in sending to us daily, and sometimes twice a Day, during this space, Food from his own Table. In fine, we look'd on all these Favours of the Royal Family, as the effects of a particular Providence which watched over us, and over Christianity, for which we had so much the more occasion to thank God, for that the affection of the Emperor, was never so constantly shewn to the Grandees of the Empire, nor to the Princes of the Blood.

As to what relates to the other particularities of our Journey, they are like to those which happened to us the last Year, in the Journey to the Eastern *Tartary*, which I have fully described in my last Letter; that is to say, that we made use of the Emperor's Horses, and of his Litters, that we lodged in the Tents, and eat at the Table of the Prince his Unkle, to whom he had particularly recommended us.

During more than 600 Miles, which we had passed in going and returning (for we did not return by the same Road) he caused to be made a great High-way cross the Mountains and the Vallies, for the Queen Mother, who went in a Chariot; he caused also an infinite number of Bridges to be made over the Torrents, as also the Rocks to be cut, and the Points of the Mountains, with incredible Pains and Expences: Father *Grimaldi* shall describe the other particulars in his Letters.

As to the benefit which the Religion may draw from our Journey, I have ſpoken elſewhere; it ſufficeth to ſay that the Emperor, to whoſe Will we cannot make the leaſt reſiſtance, without expoſing all this Miſſion to a manifeſt Danger, has order'd us to follow him. I ceaſed not however to ſpeak twice to that Lord of the Court, who is our particular Friend, to excuſe us for the time to come from theſe long Journeys, and eſpecially me, *who am not of an Age fit for it:* I tried to obtain at leaſt that they would be contented to take only one of us; the Letters of our Fathers were daily brought us during the Journey, and I had the convenience of writing to them, by means of the Couriers which continually went to and came from the Royal City: I write all this in haſte, that I may continue to give you an account of our Affaris.

An Explanation, neceſſary to juſtify the Geography *ſuppoſed in theſe Letters.*

IT may ſeem wonderful, that the Author of theſe Letters makes mention in his former, of a kind of War between the *Oriental Tartars* and the *Muſcovites*, notwithſtanding the extream diſtance theſe People appear to be from one another in our Geographical Charts; but thoſe who know how much the *Muſcovites* have extended the Bounds of the Empire along the *Tartarian* Sea, will judge the thing leſs difficult, beſides thoſe who have ſeen theſe Countries, have made Diſcoveries much differing from thoſe which our Geographers have informed us of hitherto. Very lately *Monſieur D' Arcy*, who commands one of the King's Ships, in the Fleet of *Monſieur Le Mareſcal d' Eſtrees*, informed us, that having ſerved in *Poland*, and having been made Governor of a Place towards *Moſcovy*, the *Moſcovite* Ambaſſadors in their return having paſs'd by him, and being by him treated in ſuch a manner as put them into a very good Humour; one of them ſhewed him a Chart of the Countries between *Moſcovy* and *China:* and told him, that from three Cities which he ſhewed him, whoſe Names were *Lopſla*, *Abaſinko*, *Nerginsko*, all three under the Government of

of the great Dukes, tho' ſituated in the great *Tartary*, there was a way to *Pekin*, which was not more than 25 or 30 Days Journey. This Map it ſeems muſt be kept very ſecret in *Moſcovy*: For the next Day the *Moſcovite* was in diſpair, for having given it, ſaying that if it ſhould be known, he ſhould come to great Damage. The Officer being come back ſince into *France*, has given a Copy to the King, and another to *Monſieur Le Marquis de Signelay*. To confirm this, it may be added, what a *French* Man has writ from *Moſcovy* within this two Months, that they are actually raiſing Troops to go to War with the *Chineſe*.

Some Observations and Conjectures concerning the Chinese *Characters. Made by* R. H. *R. S. S.*

WHether there ever were any Language natural, I dispute not: But that there have been, are, and may be, artificial Languages 'tis not difficult to prove. The *Chinese* Court Language is said to be of this kind, invented and spoken by the *Literati* and *Mandarines* throughout the whole Empire of *China*, differing from all the other Languages spoken in it, and I conjecture it to be nothing else but the Names of the Character by which they write and express their meaning, arbitrarily imposed by them, as we in *Europe* set names to Arithmetical Figures, not as we pronounce Words written with a litteral Character. This I Judge by comparing the Characters with the Names, Monosillables or Words they pronounce and read them with. Nor do they ascend above a Monosillabical Name, tho' the Character be composed of many single Characters, each of which hath its proper Sense and Monosillabical Name, and though the meaning of each Character, be an ingredient in the Notion of that compounded Character.

I might give an Instance also in the Artificial Language Invented by the Late Reverend Bishop of *Chester* Dr. *Wilkins*, which in all the accomplishments of Language doth excel any one yet extant; to which is also annexed a real Character, Legible into that or any other Language Spoken. By which Language the Character and every additional Mark is effable, and yet the Character is not Litteral but Real, which is more curious and useful than the *Chinese* way. Great pity it is that Discourse is not published in Latin, that the Learned of *Europe*, may think of further Improving it, and bringing it to Use.

But whatever we may judge of Language, 'tis past dispute that Writing was ever Artificial, how Antiently so ever it were in Use, and was the Invention of some thinking and Studious Men. 'Tis also evident that there have been various ways thought of for Expressing Significancy, according to the several *Genii* of the Persons that were the Inventors. As may be guessed by the *Ægyptian* Hieroglyphicks, the *Chinese* Characters, the *Mexican* Chronology, and the Literal Characters of several Nations, each of which seem to proceed upon differing methods, and from differing thoughts of Invention.

Which of these ways is the most Antient, is hard to prove. The *Ægyptian Mummies* and *Obelesks* prove a great Antiquity of the Hieroglyphicks, but yet the *Chinese* Chronology (if to be credited) outstrips the *Ægyptian* in pretence to Antiquity. For the *Chinese* make *Fohi*, the first King of *China*, to be

the inventer of their Character: And account him to have lived 2950 Years before the time of Christ, during all which time they pretend to have a certain and written Account in their Books: But their Account of the times preceding, they esteem more Hypothetical and Fabulous; depending chiefly upon Fiction and Oral Tradition: As you will easily believe, when you understand how many Years they make it since the Creation of the World to the present Year 1686. which by the Account thereof in Mr. *Graves*'s Translation of *Vulg. Beig.* will be found to be no less than eighty eight millions six hundred and forty thousand one hundred and two Solar Years, there having been run out since the Creation 8864 *Ven.* of Years (every *Ven.* containing ten thousand such Years) and of the present *Ven.* this Year 1686. is the 102d. Which Account is abundantly more extravagant than the *Ægpptian*: But this need not invalidate their History since *Fohi*; by which it appears that their Character was invented before the time of *Moses* about 1400 Years, and even before *Menes* the first King of *Ægypt* about 500 Years. So that the *Chinese* Invention of Writing or Characters, seems to be the most ancient of that kind. And the Book *Yekim* said to be written by *Fohi*, the most antient Book.

These Accounts made me the more desirous to understand somewhat of the Reality and Truth, of what is related concerning the Knowledge of Literature and manual Arts, which these People of *China* are said to have possessed so long a time in so great Perfection,

fection, and without Alteration from the primitive Institution, especially upon the Account of their Art of Printing, which gave a hint to the Inventers of that admirable and most useful of all Inventions (for the Common Wealth of Learning) the way of Printing here in *Europe*. For *Paulus Jovius* affirms that the first occasion of that Invention in *Germany*, was a *German* Merchant, who returning out of *China* into his own Country, related what he had observed concerning the Practice of it as used in that Country. And tho' the *Chinese* way be wholly differing as to the method of composing, from what was invented and perfected here: Yet such an intimation was enough to an ingenious Artist to improve the first Contrivance, and make it more accomodate to the literal way of Writing with us: And as our way may possibly be now brought to the greatest Perfection for exactness and expedition, so without doubt must be their way of Printing any thing just as it is written, since I find, that they can ingrave their Stamps for a Sheet, as soon as one of our Compositers can set and correct a Sheet of our literal Character, and when so done, one Man alone will print off 1500 Sheets in one Day. And though 'tis generally believed to be much the same with our Wooden Cuts for Printing, yet from some Observations I have made, I believe it to be much another way; of which I shall hereafter say more when I describe their other Arts of Pottery, Staining, Varnishing, *&c.*

By a *Chinese* Manuscript, out of which I transcribed the Lord's Prayer in the Year 1666 (when it was lost) I found that the Pronuntiations had no affinity with the stroaks of the Character. Whence I conceived it was either a numeral Character consisting of Numbers, or else a real Character, but not a literal, unless it were a literal Character of some other Language than that by which it was pronounced, whose pronunciation is lost though the significancy be retained, as if one should read what is written in *Hebrew* בראשיתברא into the *Latin* or *Roman* Language, *In Principio Creavit* instead of *Brasit bra*, or *Beresith Bara* according to the *Masorethæ*.

Since that time I procured from *China*, a Dictionary of the Court Language, (as I found it written upon by the Person that sent it me from thence) but this whole Book (which I found was Printed) consisted only of the *Chinese* Characters without any Interpretation, or Pronunciation; however by the help of the Pictures of that, and a *Chinese* Almanack, I quickly found out their Characters for Numbers, and their way of Numeration, together with the Figure and Use of their *Abacus* or counting Board, for performing the Operations of *Arithmetick*, which I find pretty near to agree with that of the antient *Romans* (a Description and Picture of which is given by *Ursinus*, *Pignorius* and *Velserus*) save only, that, instead of Pinns and sliding Groves of the *Roman*, the *Chinese Abacus* hath Strings or Wires and Beads, to slide upon them; and that, instead of four

Pins

Pins for Digits or Units, the *Chinese* hath five Beads: So that it may seem to argue that the *Chinese Abacus* was designed for a *Duodecimal* Progression: Whereas that of the *Romans* was design'd for the *Decimal.*

One thing is remarkable in the *Chinese*, that I find the *Abacus* to lie Horizontal, and their first place to be that next the left Hand, which I judge was also the first in their old way of reading, much the same with ours, though their other Characters are erected (as I shall by and by shew) from the posture of Writing and Reading, which I conjecture they did at first make use of; and what does yet further agree with this conjecture, is remarkable in the newly mentioned Treatise of *Vulg. Beig.* That whereas the way of Writing and Reading used by the *Arabs*, was from the right to the left, the first place or the place of Units in their Numeration, was that next the right Hand; and so came first to be read: As did that of *China*, who as I conceive read the contrary way, from the left to the right.

It appears therefore by this Remark that we received this way of expressing Numbers from the *Arabians*, for that we keep the same posture or position of places with them, tho' our progression in Writing and Reading be the contrary way. And though we now read them also in the order they are set, twenty one, twenty two, thirty six, forty eight, *&c.* yet we retain also the other way of Pronuncing, *viz.* one and twenty, two and twenty, six and thirty, eight and forty, *&c.*

Now

Now as the *Chinese* and *Roman Abacus* do much agree save only that they proceed contrary ways, so doth their way of expressing Numbers by Letters or Marks, one stroke or line signifying one; two lines two; three lines three; a cross ten; two crosses twenty; three crosses thirty; and so onwards to a hundred, which they expressed by a square Mark, and a cross with a stroak added for a thousand, as will appear by the Table annexed. And though the Characters are not all the same; yet the order and method of one agrees very near with that of the other, especially if I may be allowed my supposition, that the primitive way of Writing and Reading with the *Chinese* was Horizontal, and like the *Greek* and *Latin* or *European* way. Now that these are properly numeral Figures, or Characters, is manifest from this, that they have also word Characters for every Number, and they can (in the same manner as the *Romans* could) express a Number by their numeral Characters or Marks, and by their literal or word Characters; for as one single stroak signifies one or the first, so does the Character (*in the Plate marked with E*) signify the same thing, that is one or the first.

Having thus discovered their Characters for Numbers, and their way of Numeration, I was next desirous to understand something concerning their Language and Character.

Upon perusing all the Accounts I could meet with in Books, I found very little satisfaction as to what I principally inquired after

ter, which was first concerning the method of the Character, whether it consisted of a certain number of Marks methodically disposed like Letters in a literal, or like Numbers in a Numeral, or like Radicals in composite and decomposite Derivations? 'Tis said to be legible into a great many Languages considerably different one from another, but how this is effected is not related, only 'tis said that the Marks are of the nature of our Arithmetical Figures, (which are become almost Universal at least to us here in *Europe*,) and 2dly, concerning the number of these Characters? to which I found as little satisfaction; for, by some Relations I found that there were 120000, by others 80000, and by others 60000. And that a Man must be able to remember to Write and Read at least 8000, or 10000, before he will be able to express his meaning thereby, and that it is the business of a Man's whole Life to be throughly understanding in the whole Character; seeming to intimate that the Characters are immethodical, and there are as many primitive Characters as Words. Others tell us of various kinds of Characters which have been in use in several Ages. The first they say were *Hieroglyphical* like the *Ægyptian* or *Mexican*, consisting of the Pictures of Animals and Vegetables. But that the last are made up of Lines and Points, that they have no such thing as Letters or Syllables, but every distinct Word and Notion has a distinct Character, and that all are primitive or in compositi, so that if *Calepines* Dictionary were to be translated into the *Chinese*, 'twere neces-

sary

ſary to have as many diſtinct radical Characters as there are Words therein to be found, which accounts do ſeem to inſinuate that this Character is the moſt difficult, and the moſt perplexed piece of Learning in the World, and depends wholly upon the ſtrength of the Memory, in retaining the form and ſignification of a perplexed ſcraul. But whether they who gave us theſe Accounts did do it knowingly, is much to be doubted, my own Obſervations, at leaſt, make me think otherwiſe.

I have not yet been able to procure ſufficient helps to inform my ſelf of the whole Art of Writing and Reading the *Chineſe* Character, and I fear the Relations I have hitherto met with concerning it, were written by ſuch as did not well underſtand it, however from ſuch helps as I had, what I collected or do conjecture, I ſhall here relate. The beſt help I had, was the peruſal of ſome Books Printed in *China*, with the pronunciation and ſignification of the Character in Latin Letters. By theſe Books then I obſerved, firſt, that every one of their Characters, whether conſiſting of more or fewer ſtrokes or marks, were compriſed within a certain ſquare ſpace, which is proportion'd according to the bigneſs of the ſize or manner of Writing, they deſign there to make uſe of, not that the whole Square is filled with every Character, but that no part of that Character does exceed the limits of that Square, ſo that tho' the Character have but one ſtroak, it takes as much room in the line as another that hath 20 or 30 ſeveral Marks, ſo that their Characters

racters are moſt exactly ranged in Rank and File, not unlike our Numbers in Arithmetick.

Notwithſtanding which I find they do vary the bigneſs of the Character upon ſeveral Occaſions, as in the Titles of Books, in the Titles of the Chapters or Sections, in the Comments, Explications or Notes, and upon ſeveral other occaſions of variety, which they do at Pleaſure with their Pencil, as we uſe variety of Letters in the Printing of a Book. The Titles of Books are generally in very large Characters, 6 or 8 times as big as thoſe of the Book, the explication Notes $\frac{1}{2}$ of the bigneſs, the Contents uſually twice as big, and the like variety on ſeveral other occaſions. I have met with alſo three ſeveral kinds of Characters, the moſt uſually twice as big, and the like variety on ſeveral other occaſions. I have met with alſo three ſeveral kinds of Characters, the moſt uſual is the fixed or ſet ſquare form. The ſecond ſort is the running Hand, in which the orders of the Courts are written by their Secretaries, of which I have ſeen 3 or 4 kinds, in which the Pencil is never taken off, till the whole Character be finiſhed, and ſometimes two or three are all written without break. The third ſeems to be ſomewhat like the flouriſhing great Letters, uſed by Scriveners at the beginning of Deeds, and by the *Germans* in the beginning of Chapters and Sections. They are compounded of the ſame ſtrokes as the ſet Character, but modulated and ſhaped a little otherwiſe to make them appear the more beautiful and regular.

A Specimen of each of these three are in the Plate. This third is made use of for Epitaphs, and other Inscriptions on Buildings or Monuments. These three sorts I may call the three general kinds of Writing, but there is to be found an almost infinite variety of forms which Men use. This will be the more easie to be believed, when we consider that the Printed Characters are exactly the same with the Written, insomuch that every variety in each stroke, line or point, that is or can be made with the Pencil, is perfectly expressed in the Impression, and the Form, Mode, or Hand, as we call it, of every Writer is exhibited so curiously, that I think it hardly possible to be performed after the way of wooden Cuts, as Authors affirm it is, but must be done after the method of our Copper Cutts, Printed by a Roul-press, which the way of expressing the Running or Court-Hand, does, I conceive, most evidently demonstrate, and from divers circumstances, I could evidently make appear from the Book it self, which I cannot so well express in Writing. Their Paper is generally very thin and fine, and very transparent, but brown, so that whatever is Written or Printed on it, is almost as legible on the back, as on the foreside, which is of great use in the cutting of their Stamps. And thence they never Write or Print on both sides of the same Leaf, but only on one, and to make the Leaf appear Printed on both sides, they double the Sheet with the Printed sides outwards, and putting the folded part forward, they Sew, Bind, or Stitch together, all these Sheets with

with the cut Edges, and upon whole Sheets instead of single Leaves; just in the same manner as the Plate annexed to this Discourse is Printed. They begin the Book on the top of the right Hand side of the Page that is next the right Hand, and they read downwards to the bottom, then begin the next Line towards the left Hand at the top, and so read to the bottom, and so proceed to the end of the Book. But this I suppose not to be the the primitive or first way of Writing or Reading. The Title of the Book is set first upon a whole Leaf, usually of a thicker Paper, and some Title is likewise Written upon the folding or edge of every Sheet, where is set also the Number of the Book, and the Number of the Sheet, half of which appears on one side, and half on the other side of the fold.

As to the Character it self, (I find by all the Books and Writings I have yet met with of that kind) that each of them is made up of a certain number of Strokes, Lines or Marks, which are very distinct from each other in their shape and position, and by reason that these are single Srokes, and as I conceive uncompounded, I think they may be called the Letters, Elements or Particles, out of which the more compounded Characters are constructed or contexed. These are the first kind of which there are but a very few, and I think those I have described in the thirteenth Line of the Plate are all.

Two, three, four, or more of these joined together in a certain order and contexture

ture (in the doing of which there is a great Regularity and Order observed, which is not varied from, and all within the regular square Space) I conceive do make Syllables or primitive radical Characters, each of which have a primitive, single or distinct Notion or Signification as well as Sound, which is made much use of in the more compounded Characters or Words. Of this kind I take the Figures of the Numbers to be: If at least they are not single Letters like the way of expressing Numbers in the *Hebrew*, *Greek*, *Arabick*, &c. Languages, for though there may be two or three of the single strokes joyned together into a compound Character, it hinders not, but that it may still signify a Letter, as in the *Greek* ΛΑ.Δ.Ι.Γ.Π.Γ. In the Runick; where every Letter hath one upright Line and some other additional Marks: In the *Roman* I.L.F.E.O.Q.V.Y: Or it may signify a Syllable as in the *Æthiopick*, and in the *Hanscret*, and *Sunscrit* Languages and Characters: The first of which being the *Brackmans* Character we find in *P. Kircher*'s *China Illustrata*, described by *P. Roth* who studied it seven Years; and the second (being a literal Character used over all *India* by the Merchants) I have seen in a Transcript, brought lately out of *India* by a very Worthy Gentleman who lived there many Years, and had the Curiosity to cause to be Transcribed and Translated also into English, a Dictionary of their Language in their own Character: who did me the favour to let me peruse it.

In

In which Characters or ways of Writing a Vowel is always join'd with a Consonant into one compound Character to make it effable. And then the single Strokes may be taken for single ineffable Letters as are the Consonants, and the composition of two or three (of which one at least may be a Vowel) will make Syllables.

Of this kind, there are not so many in the whole *Chinese* Character, but that it will be easie enough to assign each a proper Monasyllable which shall only have 1 or 2 Consonants, and one or two Vowels; that is, the Consonants together, and not separate, either both behind the Vowel or Vowels, if it be a Dipthong or both after it or them.

Of this kind, I understand there are about 500, probably 8x8x8, or 512. I could enumerate a great many, and give you also the Name or Words by which they are pronounced as also their signification, but (as I said before) first, I conceive the present *Chinese* Language to have no affinity at all with the Character, the true primitive, or first Language, or Pronunciation of it, having been lost. And secondly, I want some further help to make a full and compleat Discovery: What I have learn'd from the Book of *Fohi* I shall give the next opportunity; which will explain the reason of the multiplication of 8. and the order and method of places in the Letter or Word square.

The third sort of Characters, is a decompounded sort being made up of two, three or more of those of the second kind, diminish'd proportionably in their size, either as to their

length, or breadth, or both, from what they have in the same Writing when they are single and fill up the whole Letter square or Words square. For there being several of them to be crouded together within the same square, according as there are more in number, so they are always more squeezed together. In this decompound sort, there is a regular Order observed in the placing of the several Characters of the 2d sort; there being some that are always on the left side, some always on the right, some at the top, some at the bottom. Of which I doubt not but that they have a certain regular Method, which had we Dictionaries explained, would be easie enough to be discovered.

This method alone of crouding together all the Characters (how many soever go to make up the decompounded Character) into one square (which is of the same size for the most Simple and for the most Compound) seems to be the great singularity, by which the *Chinese* Characters differ from those of all the rest of the World. And this I conceive has been the reason why all People, and possibly even the very *Chinese* themselves have, and do believe it to be a real and not a literal Character: For if the primitive Language, or pronunciation of the Characters be lost (as I conceive it is) and that the disposition, order, method, texture, or manner of placing the more simple in the more compound Characters be also lost, forgotten, or not understood; then the whole Characters becomes a real and not a literal Character: And an immethodical one to such as want a method, that must be learned by

by roat, and depend wholly upon the strength of the Memory to retain it. But I conceive it might be at first either a literal Character, and so the whole square Character was composed of so many distinct Letters or Syllables, which composed the Word signified thereby; and so there might be a regular Order of placing these Letters in the Character, that is, that the whole square being divided into so many parts, there was a Rule which was the first, second, third and fourth place: so that there being placed in those the several Letters that made up the Word, according to the order they had in the Word, it was easie by that Rule to Decipher the said Character, and thence to find the Word and the Signification, as regularly as if the Letters had been written one after another, as most other literal Characters we know are at this Day written.

Or Secondly, it might be a real Character consisting of divers Marks or Letters, that expressed so many simple Notions, several of which joined together might make up the more compounded Characters, of which I have added some Examples in the Plate, which may be also made literal and pronounceable, tho' that consideration were not made use of, when they were first invented. What things I have observed in my *Chinese* Books that seem to respect this Method, I will give more particulars of by the next opportunity, by Printing a Specimen of the Book *Ye-kim* which explicated by these Notions will I conceive appear more intelligible, than by the Accounts we find given of it by

the *Chinese* Commentators, and those that have Translated them into *Latin*, who seem not to have understood the true design thereof: For both the *Chinese* and *European* Commentators assert it to be a Conjuring Book, or a Book to tell Fortunes by, and to be made use of by the *Chinese* for that purpose; whereas by the small Specimen I have seen of it, I conceive it to contain the whole Ground, Rule or Grammar, of their Character, Language and Philosophy, and that by the understanding of it, the Foundation and Rule of their Language and Character may be without much difficulty Deciphered and Understood.

The present use of this Character, I conceive to be differing from what it was at first, both as to the position of Writing and Reading it, and as to the Expression and Pronunciation thereof.

For the way of Writing and Reading it, I conceive might at first be exactly the same with that of the *Greeks*, *Romans*, *English*, and all other *European* Nations, and also the *Æthiopick* and *Coptick*. That is, they began at the top of the Page towards the left Hand, and so proceeded towards the right in the *Horizontal* Line to the end of it, and then began at the left end of the next Line under the first and proceeded with that in the same manner, and so with the next under that and all the remaining. Continuing to Write the Words of the Line towards the right Hand, and the Lines of the Page one under another till the whole Discourse were compleated, joyning Leaf to Leaf one under another, after the same manner as the Rouls

are at present Writ, and as the *Volumina* were of the Ancients. And to make the parts of the Volume to be the more easily to be come at, without the trouble of rouling and unrouling as the Ancient *Romans* did, and we do with our Rouls, they contrived to fold them, like the folds of a Fan, forwards and backward: And so stitching them together, that the Written sides might lie outwards, and open freely one from another, and the fair sides might meet together, it came to make the present form of their Book, which being laid as we generally place our Books before us, they seem to begin at the top of the Page on the right Hand, and to proceed to the bottom,and then at the top of the next Line towards the left Hand, and descend as in the former; proceeding in this order with all the rest, which way must needs be very inconvenient for Writing, however they may use their Pencil differing from our Pen. Though there be a way of Writing from the top to the bottom of the Page, which is very convenient for Writing the *Syriack*, as also for Writing *Latin*, *English*, or *Greek*, where the Writing is to be used for cutting the Stamps of Wood, or graving of Copper Plates with the same Character for Printing, in which Cases the Letters must be written backwards.

Secondly, as to the Pronunciation of this Character, by the Court Language, or by any other now used, I conceive it to be wholly differing from that of a literal Character, that is from being pronounced or spoken according to the Marks or Figures thereof,

whether they be simple or compounded, and made up of simple Characters (though there are some Instances of affinity in Characters and Words.) The reason of which differing pronunciation I conceive may have proceeded, partly from the loss of the primitive Language, for which it was made, partly from a most inconvenient affection of Monasyllabical Words in this Court Language, to help the Poverty of which, they are fain to make one Syllable to signifie many differing Notions, to do which they have introduced a kind of Musical toning or accenting of each of them, and not single but compound of two or three Tones to each signification of every one of these Monasyllables: Partly from the using of this way of Writing, by divers Nations of differing Languages, who minding only the Figure and Signification, read it into their own Mother Tongues, as we in *Europe* do Arithmetical Figures: And partly, also from the omission of most Grammatical Distinctions, the same Character serving for Substantive and Adjective, Singular and Plural, in all Cases, (save only they have some Characters for Particles, as *of* and *to* in English) for the Verb in all Tenses, and Numbers, *&c.* for the abstract and the concrete Signification, and for divers Metaphorical; if at least the Interpretation I have met with in the Books I have perused be exact: Partly, also from the *Syntaxis* of them, it being necessary to consider the whole Sentence, to discover which part of Speech each Character is of, in that Sentence, wherein the Order and Positions of the Characters to one another, for which they have Rules,

hath

hath its signification: And lastly, from the loss of the very Notion of a literal Character, whence for the expressing of proper Names, they are fain to make use of several Characters, whose Sounds or Words come neareſt to the Sounds of the Syllables of that Name, as in the Plate *tam. jo, van*, for *Adam. Jovan.*

Now, though I conccive this Character is not effable properly as a literal Character by any of their present Languages: And though possibly it might be at first a real Character, that is each of them compounded of such Strokes or Marks as by their Figures, Positions and Numbers in the square, denoted the several Philosophical Ingredients, that made up the Notion of the whole Character, as the Book *Ye-Kim* seems to shew by giving Rules as I conceive for the Order and Significancy of places in the Square, *&c.* Yet I think it not difficult to make it a Literal, or at least a Syllabical Character, and legible into a Language somewhat after the manner of the Universal Character I mentioned before. And tho' this would not be the primitive Language for which it was made, yet for the present uses of it (the chiefest of which is the assisting and refreshing the Memory, and helping the Imagination by proper Sounds) it might be as good: Wherein the single Characters might be Monasyllables and the compounded Dissylables, Trissyllables, *&c.* According to the Numbers and Order of simple Characters in the square of the Compounded. And I am apt to think that the present pronunciation of Languages, as of *Hebrew*, *Syriack*, *Arabick*, *Greek* and *Latin*, or any other

Language that has been so long Written, may be as much differing from what it was 2000 Years since, as an Arbitrary one now invented, and grounded on the Letters, might possibly be. And such an arbitrary Pronunciation if generally agreed upon might serve *as well* for a help to learn the signification of Words, or *Word Combinations* of Characters, as if we now knew the exact primitive Pronunciations, as critically as the *Masorethæ* are said to have done that of the *Hebrew*; and possibly also a *much better*, for that by such a one a great many irregularities and difficulties of Pronunciation (which are to be found in all Languages now spoken) might be omitted, and the whole made exactly regular and easie, as might be shewn in the *Hebrew* and *Greek*, and especially in the *Arabick*, whose difficulties are sufficiently manifested by *Alphabetum Arabicum*, Printed at *Rome* 1592. Now as by such a Language the Character might be made effable without Musical Tones or difficult Aspirations, so had we Dictionaries of the signification of the Characters, we might as soon learn the *Chinese* Characters, as we can *Latin*, or any other Language to be learn'd by Book, and not by speaking.

IMPRIMATUR,

John Hoskyns Vice P. R. S.
July 17*th*. 1686.

yĕ th' fan fu' ẓ' ẓĕ' pŭ' kuen ẓĕ' ẓĕ'yŭ' ẓĕ' Ih' ẓĕ' fan ẓĕ' ẓ'
一 二 三 四 五 六 七 八 九 十 十一 十二 十三 十四 十五
I II III IV V VI VII VIII IX X XI XII XIII XIV XV

Ih'xĕ' Ih' ẓĕ' fangyĕ' fan ẓĕ' fu' ẓĕ' ẓ' ẓĕ' lŏ' ẓĕ' ẓĕ' pŭ' ẓĕ'
十一 十二 十三 十四 十五 十六 十七 十八 十九 二十
XI XII XIII XIV XV XVI XVII XVIII XIX XX

XX XXX XXX XXXX L LX LXX LXXX XC C
二十 三十 四十 五十 六十 七十 八十 九十 一百

pĕ' pĕ' fan pĕ' fu' pĕ' nien Ih' nien fan nien wan fan wan'
一百 二百 三百 四百 一千 二千 三千 一萬 二萬 三萬
100 200 300 400 1000 2000 3000 10000 20000 30000

nien lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge'
四萬 五萬 六百 七百 八百 九百 一千 二千 三千 四千
40000 50000 DC DCC DCCC CM I M II M III M IV

Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge'
一萬 二萬 三萬 四萬 五萬 六百 七百 八百 九百 一千
10000 20000 30000 40000 50000 DC DCC DCCC CM I M

ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge'
二千 三千 四萬 五萬 六百 七百 八百 九百 一千 二千
II M III M IV M L DC DCC DCCC CM I M II M

lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ'
三千 四萬 五萬 六百 七百 八百 九百 一千 二千 三萬
III M IV M L DC DCC DCCC CM I M II M XXX

ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ'
四萬 五萬 六百 七百 八百 九百 一千 二千 三萬 四萬
IV M L DC DCC DCCC CM I M II M XXX IV M

lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ'
五萬 六百 七百 八百 九百 一千 二千 三萬 四萬 五萬
L DC DCC DCCC CM I M II M XXX IV M L

pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ'
六百 七百 八百 九百 一千 二千 三萬 四萬 五萬 六百
DC DCC DCCC CM I M II M XXX IV M L DC

pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ'
七百 八百 九百 一千 二千 三萬 四萬 五萬 六百 七百
DCC DCCC CM I M II M XXX IV M L DC DCC

lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ'
八百 九百 一千 二千 三萬 四萬 五萬 六百 七百 八百
DCCC CM I M II M XXX IV M L DC DCC DCCC

nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen
九百 一千 二千 三萬 四萬 五萬 六百 七百 八百 九百
CM I M II M XXX IV M L DC DCC DCCC CM

ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ'
一千 二千 三萬 四萬 五萬 六百 七百 八百 九百 一千
I M II M XXX IV M L DC DCC DCCC CM I M

yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ'
二千 三萬 四萬 五萬 六百 七百 八百 九百 一千 二千
II M XXX IV M L DC DCC DCCC CM I M II M

ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ'
三千 四萬 五萬 六百 七百 八百 九百 一千 二千 三千
III M IV M L DC DCC DCCC CM I M II M III M

fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge'
四萬 五萬 六百 七百 八百 九百 一千 二千 三千 四千
IV M L DC DCC DCCC CM I M II M III M IV M

Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih'
一萬 二萬 三萬 四萬 五萬 六百 七百 八百 九百 一千 二千 三千 四千 一萬
10000 20000 30000 40000 50000 DC DCC DCCC CM I M II M III M IV M 10000

ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ'
二萬 三萬 四萬 五萬 六百 七百 八百 九百 一千 二千 三千 四千 一萬 二萬
20000 30000 40000 50000 DC DCC DCCC CM I M II M III M IV M 10000 20000

fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ'
三萬 四萬 五萬 六百 七百 八百 九百 一千 二千 三千 四千 一萬 二萬 三萬
30000 40000 50000 DC DCC DCCC CM I M II M III M IV M 10000 20000 30000

ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ'
四萬 五萬 六百 七百 八百 九百 一千 二千 三千 四千 一萬 二萬 三萬 四萬
40000 50000 DC DCC DCCC CM I M II M III M IV M 10000 20000 30000 40000

lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ'
五萬 六百 七百 八百 九百 一千 二千 三千 四千 一萬 二萬 三萬 四萬 五萬
50000 DC DCC DCCC CM I M II M III M IV M 10000 20000 30000 40000 50000

pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ'
六百 七百 八百 九百 一千 二千 三千 四千 一萬 二萬 三萬 四萬 五萬 六百
DC DCC DCCC CM I M II M III M IV M 10000 20000 30000 40000 50000 DC

pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ'
七百 八百 九百 一千 二千 三千 四千 一萬 二萬 三萬 四萬 五萬 六百 七百
DCC DCCC CM I M II M III M IV M 10000 20000 30000 40000 50000 DC DCC

lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ'
八百 九百 一千 二千 三千 四千 一萬 二萬 三萬 四萬 五萬 六百 七百 八百
DCCC CM I M II M III M IV M 10000 20000 30000 40000 50000 DC DCC DCCC

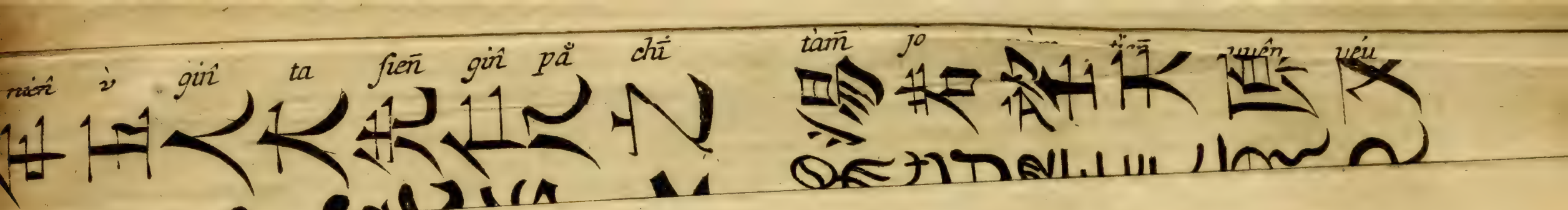
nuen ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen
九百 一千 二千 三千 四千 一萬 二萬 三萬 四萬 五萬 六百 七百 八百 九百
CM I M II M III M IV M 10000 20000 30000 40000 50000 DC DCC DCCC CM

ẓ' yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ'
一千 二千 三千 四千 一萬 二萬 三萬 四萬 五萬 六百 七百 八百 九百 一千
I M II M III M IV M 10000 20000 30000 40000 50000 DC DCC DCCC CM I M

yuĕ' ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ'
二千 三千 四千 一萬 二萬 三萬 四萬 五萬 六百 七百 八百 九百 一千 二千
II M III M IV M 10000 20000 30000 40000 50000 DC DCC DCCC CM I M II M

ẓĕ' fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ'
三千 四千 一萬 二萬 三萬 四萬 五萬 六百 七百 八百 九百 一千 二千 三千
III M IV M 10000 20000 30000 40000 50000 DC DCC DCCC CM I M II M III M

fan ge' Ih' ẓĕ' fan ẓĕ' ẓ' ẓĕ' lŏ' pĕ' pŭ' ẓĕ' lŏ' nuen ẓ' yuĕ' ẓĕ' fan ge'
四千 一萬 二萬 三萬 四萬 五萬 六百 七百 八百 九百 一千 二千 三千 四千
IV M 10000 20000 30000 40000 50000



A Letter from F. A. *Esq; R. S. S. to the Publisher, with a Paper of Mr.* S. Flowers, *containing the Exact Draughts of several unknown Characters, taken from the Ruins at* Persepolis.

SIR,

I Here send you some Fragments of Papers put into my Hands by a very good Friend, relating to antique and obscure Inscriptions, which were retrieved after the Death of Mr. *Flower*, Agent in *Persia* for our *East-India* Company; who, while he was a Merchant at *Aleppo*, had taken up a Resolution to procure some Draught or Representation of the admired Ruins at *Chilmenar*, pursuant to the third Enquiry for *Persia*, mention'd in the *Philosophical Transactions*, pag. 420. *viz. Whether there being already good Descriptions in Words of the Excellent Pictures and* Basse Relieves *that are about* Persepolis *at* Chilmenar, *yet none very particular, some may not be found sufficiently Skilled in those parts, that might be engaged to make a Draught of the Place, and the Stories there Pictur'd and Carved.* This Desire of the Royal Society,

ciety, as I believe, it hinted at a Summary Delineation, which might be perform'd by a Man qualifi'd in a few Days, taking his own opportunity for the avoiding much Expence, (which you know they are never able to bear:) So I cannot but think Mr. *Flower* conceived it to be a Business much easier to perform than he found it upon the Place, where he Spent a great deal of Time and Mony, and dying Suddainly after, left his Draughts and Papers dispersed in several Hands, one part whereof you have here, the rest its hoped may in some Time be recovered, if Sir *John Chardin*'s exact and accurate Publication of the entire Work do not put a period to all further Curiosity, which I heartily wish.

An Exact Draught or Copy of the several Characters engraven in Marble at the Mountains of Nocturestand *and* Chahelminar *in* Persia, *as they were taken in* November 1667. *By Mr.* S. Flower.

N 1. *N* 2. These two Characters are engraven on the Breast of two Horses cut out of the Mountain of Black Marble at *Nocturestand*, distant a League from *Chahelmanare*, or the Ancient *Persepolis*, one whereof is said to be *Alexander*'s, the other *Rustram*'s, (a Famous Hero supposed to have lived about the time of *Cambises*.) Mr. *Fl.*

N 1. This Character hath some Similitude with the Ancient Hebrew, but the *Persians* would have it their own, tho' they understand not a Letter. Mr. *F.*

1

2

ΤΟΥΤΟΤΟ ρΟCΥΤΟΝ ΜΑCΛΑCΝΟΥ

ΘΕΟΥΑΡΖΑ _ _ _ _ _ CΙΑωCΒΑCΙΑΕωΝ

ΑΡΙΑΝωΝ _ _ _ _ CΘCωΝΥΙΟΥ

ΘΕΟΥΜΑΠΑ _ _ ΥΒΑ _ _ Εωc

3

4

ΤΟΥΤΟΤΟ ΠΡΟCωΠΟΝ DLOCΘΕΟΥ

5

Isaac Sculpsit

$$\frac{d\lambda}{dt} = \frac{1}{2}$$

$$\frac{dt}{d\lambda} = 2$$

N 2. In these Lines the places are prickt where the Letters were defaced and not Perceptible. Mr. *F.*

N 4. These two Lines were writ entire on *Rustram*'s Horse. Mr. *F.*

N 3. This is the (*Arabick*) *Persian* Character engraven at *Persepolis* not above 500. years since, and is little different from the Writing us'd at this day. Mr. *F.*

N 5. This Character, whether it be the Ancient Writing of the *Gaures* or *Gabrees*, or a kind of *Telesmes*, is found only at *Persepolis*, being a part of what is there engraven in white Marble, and is by no Man in *Persia* legible or understood at this Day,

A Learned Jesuit Father, who deceased Three Years since, affirmed this Character to be known and used in *Ægypt*. Mr. *F.*

It seems written from the Left Hand to the Right, and to consist of Pyramids, diversly posited, but not joined together. As to the Quantity of the Inscriptions, *Herbert* reckon'd in one large Table Twenty Lines of a Prodigious Breadth. Of this sort here are distinct Papers each of several Lines.

N 6. This Character is likewise Engraved at *Persepolis*, of the like Antiqity with the former. It has some Affinity with the *Syriack* and *Arabick*, and has been pretended to be understood by some of the *Padrees*. Mr. *F.*

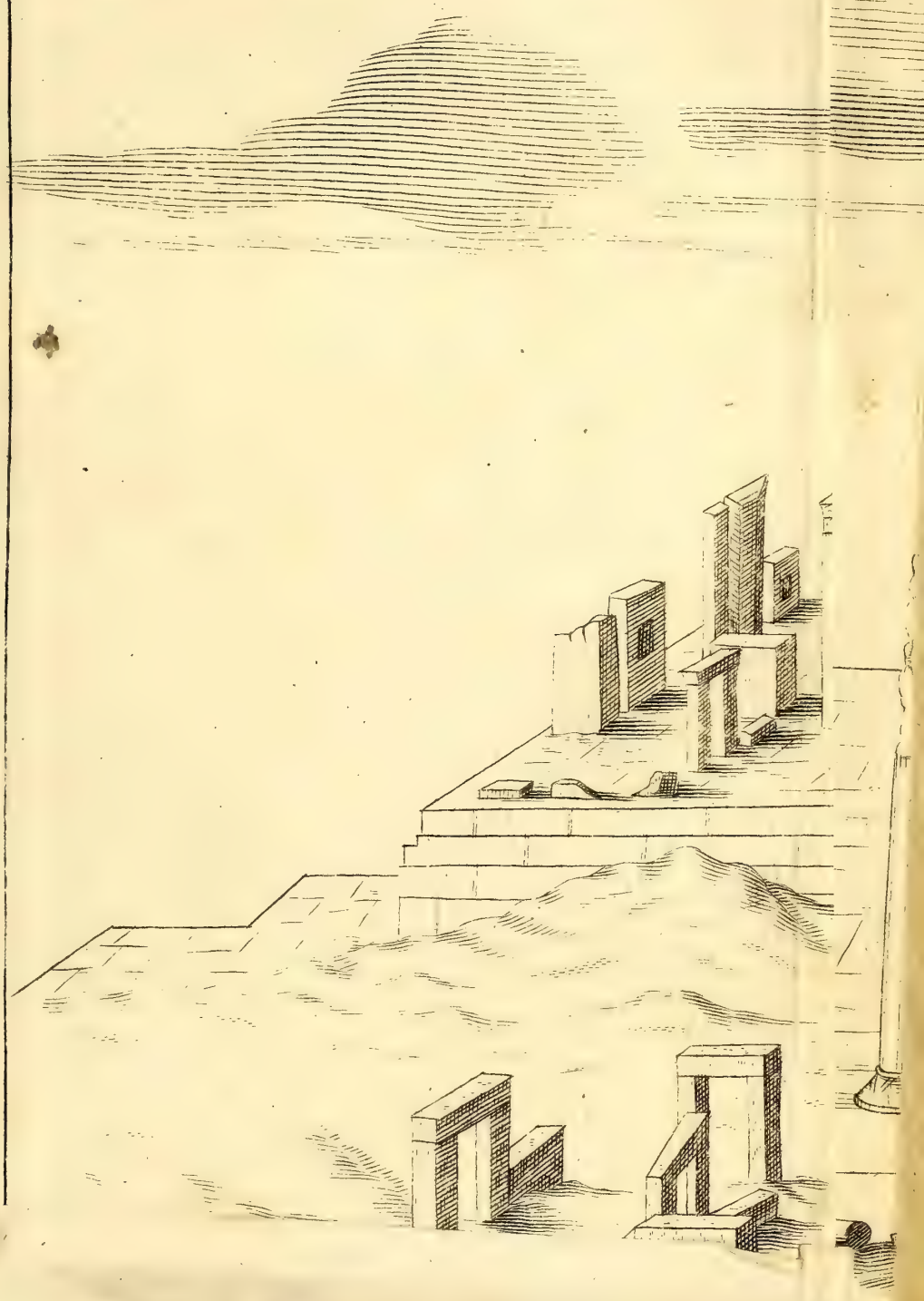
A Letter from Monsieur N. Witsen *to Dr.* Martin Lister, *with two Draughts of the Famous* Persepolis.

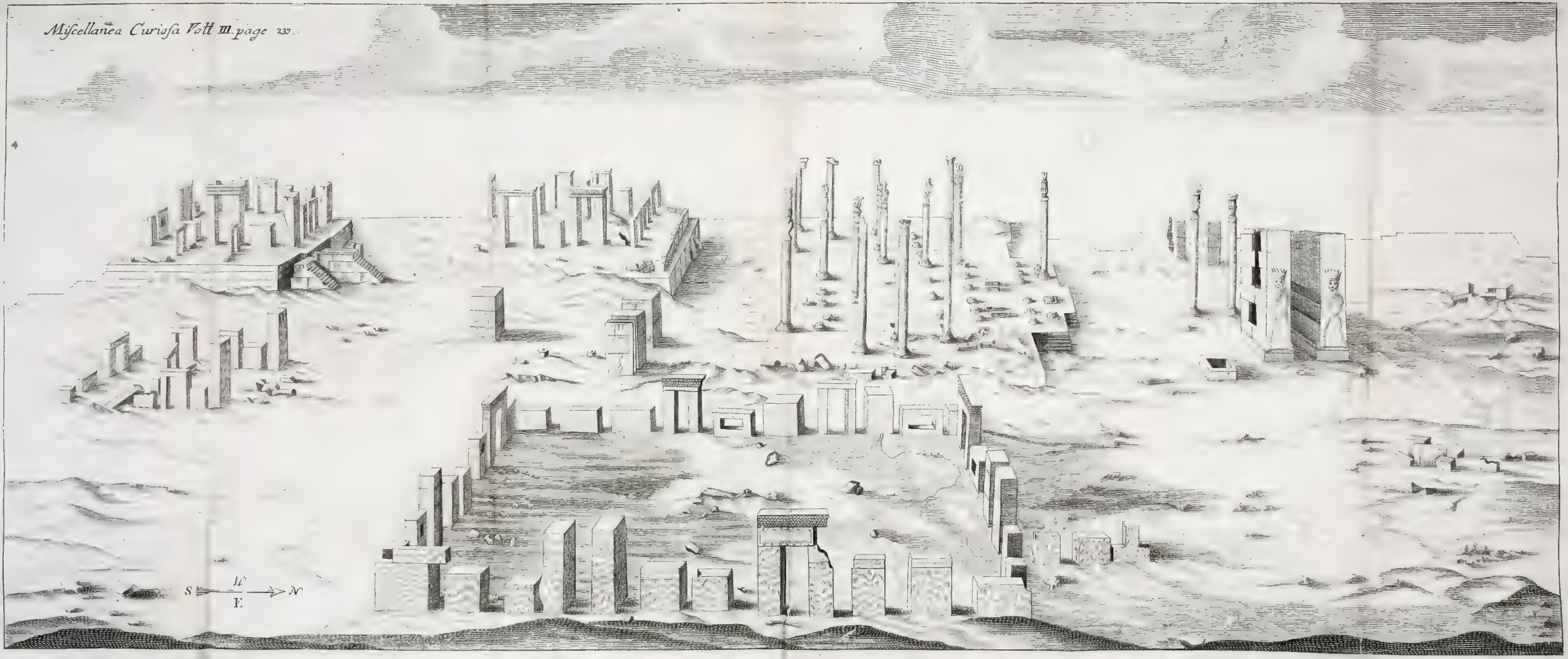
THis Ingenious and Inquisitive Gentleman having already often obliged the World with Communications of his Discoveries, lately sent the following Letter with the Draughts to Dr. *Lister*, who was pleased to permit their Publication in these Tracts: The greatness of the Curiosity we hope will recommend them to the Lovers of Antiquity, little of those famous Remains having been yet publish'd, and those that have been, but ill designed or graved. Monsieur *Witsen*'s Letter, translated from the *French*, is as follows.

SIR,

SInce I had the Honour of receiving your last, there came to my Hands several curious *Shells* from you, with a piece of *English Agate*, and the Transactions of the Royal Society for the Month of *June* last, for which Favours I return my humble Thanks. As to the Cockles of the *Caspian* Sea, and from the Mouth of *Wolga*, I have advice from *Moscou*, that they are expected there this Winter: Mean while I herewith send you some *Snail-*

Shells

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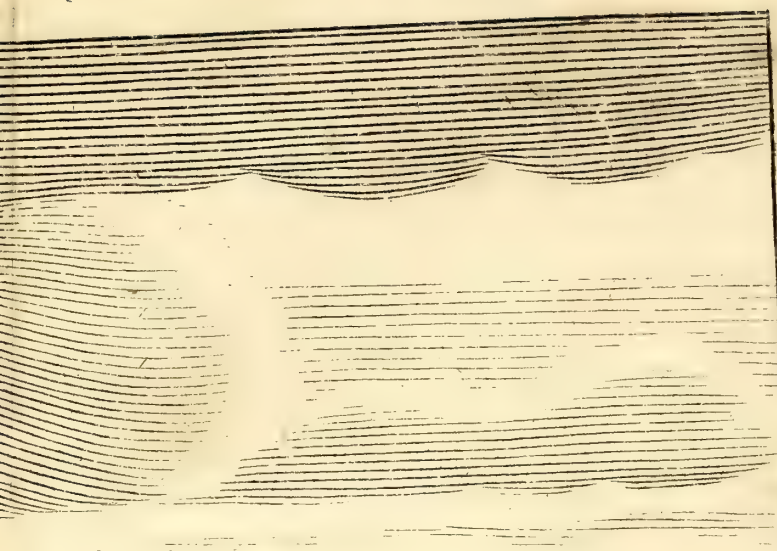
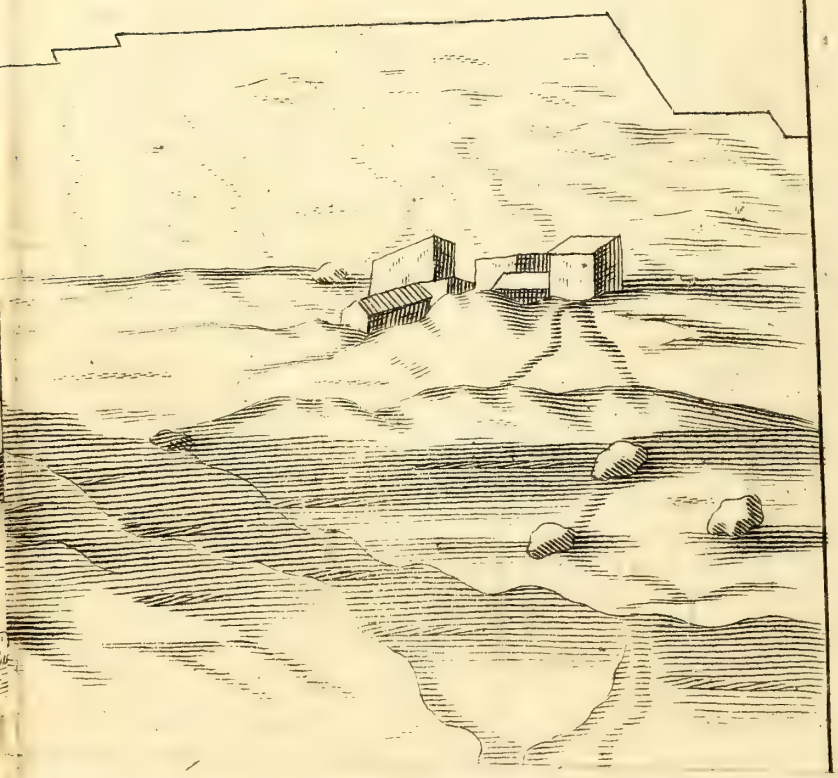
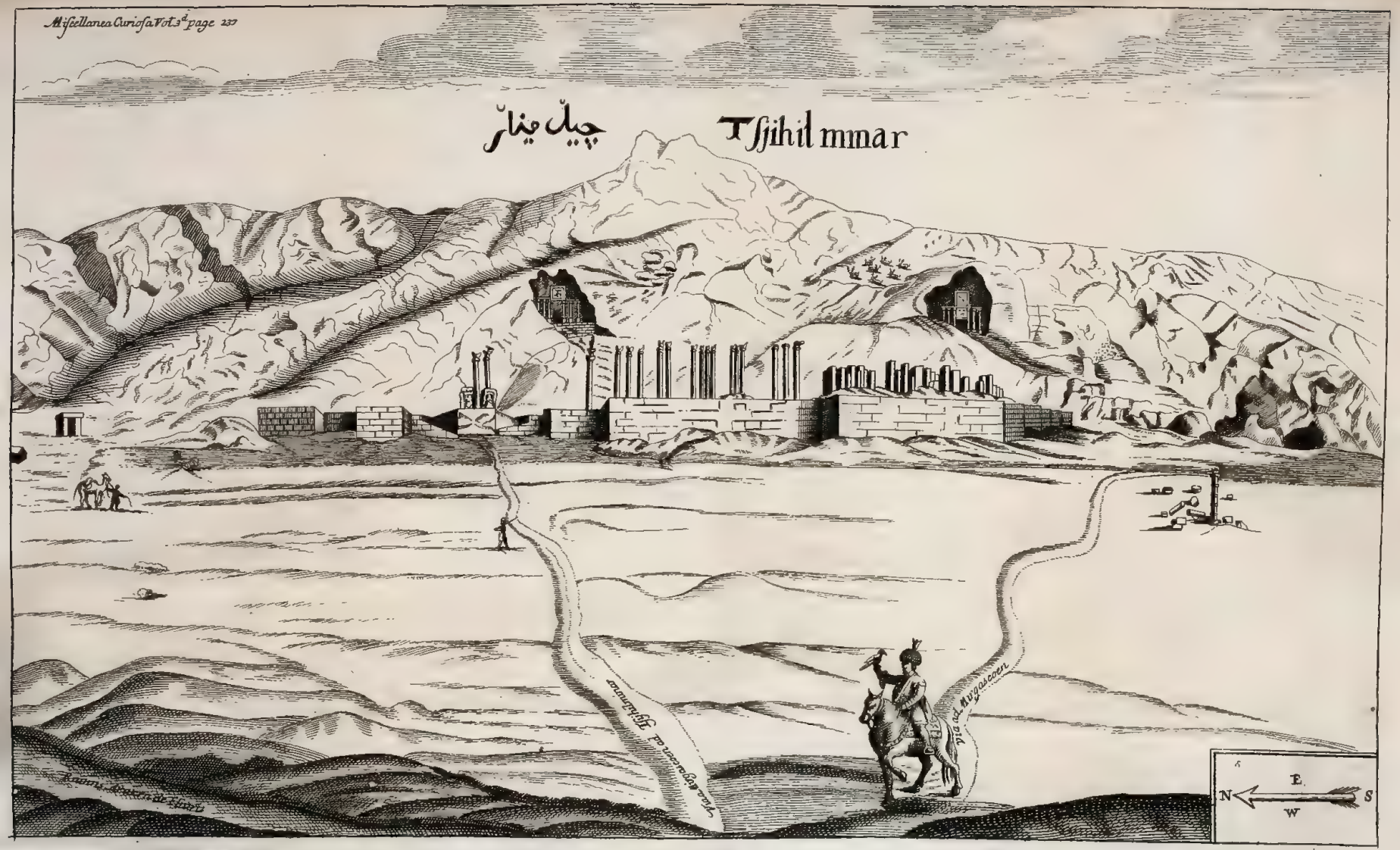




ſſihil mma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Shells, taken out of the River *Jaute*, not far from the City of *Moscou*. Our Apothecaries make use of them powdered, and probably for the same purpose as *Crabs-Eyes*. There are some others likewise which are found in the Rivers of *Moscou* and *Neglina*, and in the *Wolga*. Since you have been pleased to communicate to me an Inscription found at *Persepolis*, I thought it would be acceptable to send you the Draughts of part of the Ruins of the Stone-work of that proud Palace, given me by the Person himself that drew them upon the place. I should be much satisfied had I any thing worthy of your Curiosity and the Publick, which you so often oblige with your Discoveries, which justly merit mine and the Thanks of all that esteem them as much as my self, who am the Cherisher of your Friendship, and desirous to shew that I am,

SIR,

Your most Humble and Obedient Servant,

Amsterdam,
Jan. 1. 1694. N. Witsen.

A Description of the Diamond-mines, as it was presented by the Right Honourable the Earl Marshal of England, *to the* R. Society.

THE parts of the World known to contain *Diamonds*, are the Island *Borneo*, and the Continent of *India extra & intra Gangem: Pegu* is likewise reported to have several; but the King not potent, his Country being but thinly inhabited, contents himself with his Mines of *Rubies*, *Saphires*, *Topasses*, *Emeralds*, *Gold*, *Silver*, *Brass*, *Tinn* and *Lead*, and several other Commodities his Country affords, in great plenty, rather than to suffer new enquiries to be made, lest the Discovery of such an additional Treasure should invite some of his Neighbours, more potent to invade him. But leaving the description of other Places to those that know them better, I shall only keep my self to the Coast of *Coromandel*, with which I am acquainted, and having visited several of its Mines, am able to say something thereof Experimentally.

The Diamond-Mines in these parts are generally adjacent to Rocky-hills, or Mountains, whereof begins a great Ledge or Range near *Cape Comorin*, extending in Breadth about 50 *English* Miles, some conjoyning, others

others ſcatter'd: and running thence in length quite through *Bengula*. In, among, and near theſe Hills, in ſeveral places, are known to be (as its believed moſt of them have) Mines; many of them are poſſeſſed by petty Princes, or *Rajaes*, of the *Hundues*; ſome driven thither for ſhelter by the *Mores*, who have taken the greateſt part of their Country from them; others never overcome, as the *Rajaes*, on the Hills in and near *Bengala*, who admit of little or no Commerce with their Neighbours, or paſſage through their Country, which (being Barren, in few Places affording good Water, the ways craggy and very toilſom, eſpecially to an Army) the *Moors* covet not, but let them enjoy it peaceably; yet to prevent danger, they forbid digging (as the King of *Pegu* does) or dig ſome few Mines only very privately, ſo that a great part of the Mines are unſearcht and concealed. But the Kingdoms of *Golconda* and *Viſiapore* contain in them ſcope enough of ground, known to have Mines ſufficient to furniſh all the World plentifully with Diamonds; but their Kings permit digging only in ſome Places appointed, leſt, as it is imagined, they ſhould become too common; and withal for fear of tempting the threatning greatneſs of *Aurenge Zebe*; forbiding alſo thoſe Places that afford the largeſt Stones, or elſe keeping workmen in them for their own private uſes: So that but a very ſmall quantity in Compariſon of what might be) and thoſe only of ordinary Size, are found.

In the Kingdom of *Golconda* (as near as I can gather from the beſt acquainted) are 23

Mines now employed, or that have been so lately, viz. *Quolure*, *Codawillicul*, *Malabar*, *Buttephalem*, *Ramiah*, *Gurem*, *Muttampellee*, *Currure*, *Ganjeeconeta*, *Luttawaar*, *Jonagerree*, *Pirai*, *Dugulle*, *Purwillee*, *Anuntapelle*, *Girrogeta*, *Maarmood*, *Wazzergerre*, *Munnemurg*, *Langumboot*, *Whootoor*, *Muddemurg*, and *Melwillee* or the New Mine.

Quoloure was the first Mine made use of in this Kingdom. The Earth is something Yellowish, not unlike the Colour of our Gravel dried; but whiter in some Places where it abounds with smooth Pebbles, much like some of those that come out of our Gravel-pits in *England*. They use to find great quantities in the Vein, if it may properly be so called, the Diamonds not lying in continued Clusters as some imagine, but frequently so very scattering that sometimes in the space of $\frac{1}{4}$ of an Acre of Ground, digged between two or three fathoms Deep, there hath been nothing found; especially in the Mines that afford great Stones, lying near the superficies of the Earth, and about three Fathoms deep; deeper they could not dig for Water; it being in a Vale near a River. In other places the Earth is mixt with rugged Stones, where they seldom mine deeper, though in higher ground, before the Colour of the Earth alters, and the Vein ceases; which they give a guess at by the small Stones they find in the Earth, the principal Guide they have in the discovery of the Mines.

The Diamonds found in these Mines are generally well-shaped, many of them point-

ed

ed, and of a good lively white Water; but it also produces some *Yellow* ones, some *Brown*, and of other colours. They are of ordinary sizes, from about six in a *Mangelin* * (of which they find but few) to five or six *Mangelins*, each; some of 10, 15, 20. they find but rarely. They have frequently a bright and transparent skin, inclining to a greenish Colour, though the heart of the Stone be purely white; but the Veins of these Mines are almost worn out.

* *A* Mangelin *is* 4 *grains in weight, saith* Linschoten.

The Mines of *Codawillicul*, *Malabar*, and *Buttepallam* consist of a reddish Earth, inclining to an Orange-colour (with which it stains the Cloaths of the Labourers that work in it) they dig about four Fathom deep. They afford Stones generally of an excellent Water and crystaline Skin; smaller sizes than those of *Quoloure*, *Ramiah*, *Gurem*, and *Muttampelleo*; have a Yellowish Earth, like *Quolure*; their Stones like those of the two former Mines, but mixt with many of a blue Water. These five Mines being under the same Government with *Melwillee*, where the Governour resides; He to draw the Adventurers and Merchants near him, that he may be better informed of the Actions and Advantages, and know the better how to Fleece them, the general practice of Governours in these parts, has very lately forbid their use; and commanded all to repair to his Residence, which they must obey, or fly into another Government.

The next Mine in our way is *Currure*, the most famous of them all and most Ancient.

It has been under Subjection of the King of *Golconda*; but about 25 Years, taken, with the Country of *Rarnaticum*, from the *Hendue-Rajaes*, about that time, by the *Nabob*, *Meer*, *Jumla*. In it have been found Diamonds of a *ſize* weight, which is about 9 Ounces *Troy* or 81 ½ *Pago's* weight. It is only employed by the King for his own private uſe: The Diamonds that are found in it, are very well ſpread, large Stones (it yields few or none ſmall,) they have generally a bright Skin, which inclines to a pale Greeniſh colour, but within are purely white. The Soil is Reddiſh as many of the others.

About ſixty or ſeventy years ago, when it was under the Government of the *Hundues*, and ſeveral Perſons permitted to adventure in digging, a *Portugeez* Gentleman went thither from *Goa*, and having ſpent in Mining a great ſum of Mony to the amounts of 100000 *Pago's*, as 'tis reported, and converted every thing he brought with him, that would fetch any mony, even to what wearing Cloaths he could ſpare, while the Miners were at Work for the laſt Days expence, he had prepared a cup of Poyſon, reſolving, if that Night he found nothing, to drink his laſt with the concluſion of his Mony; but in the Evening the Workmen brought him a very fair ſpread Stone of 20 *Pago's* weight, in commemoration whereof he cauſed a great Stone to be erected in the place, with an Inſcription ingraven on it, in the *Hundues* or *Tellinga* Tongue, to the following effect, which remains to be ſeen to this day;

Your

Your Wife and Children ſell, ſell what you have,
Spare not your Cloaths, nay, make your ſelf a Slave;
But money get, then to CURRURE *make haſt;*
There ſearch the Mines, a Prize you'l find at laſt.

After which he immediately returned with his Stone to *Goa.*

Not far from *Currure* are the Mines of *Lattawaar* and *Ganjeconta*, which are in the ſame Soil as *Currure*, and afford Stones not unlike: But *Lattawaar* hath many repreſenting the great end of a Razor-blade, thin on one ſide and thick on the other, very white and of an excellent Water; but the beſt of the Mine is worn out, and *Ganjeconta* employed only to the Kings private uſe.

Jonagerre, *Pirai Dugulle*, *Purwillee* and *Anuntapellee*, conſiſt alſo of Red earth, are now employed, and afford many large Stones; part of them of a greeniſh Water; but the moſt abſolute Mines are of *Wazzergerre* and *Munnemurg*, (the other rather repreſenting Pits than Mines;) for there they ſink through high Rocks till they go ſo far below their baſis, that they can go no further for Water, in ſome places 40 or 50 Fathom deep. The ſuperficies of the Rocks conſiſt of hard, firm, white Stone, into which they cut a Pit like a Well, of about 4 or 5, in ſome places 6 Foot deep, before they come to a cruſt of a Mineral Stone, like the Mineral of Iron; when they fill the Hole with Wood and keep as hot a Fire as they can there for two or

three Days, till they think it ſufficiently heated; then they pour-in Water till they have quencht it, which alſo ſlacks and molifies both Stone and Mineral; both being cold, they dig again, take out all the crumbled ſtuff and dig up what they can beſides, before they heat it anew; the Cruſt ſeldom is thicker than three or four Foot, which ceaſing, they come to a Vein of Earth, that uſually runs under the Rock two or three Furlongs; ſometimes much further: This they dig all out and ſearch, and if their firſt attempt prove ſucceſsful, they go toWork again (digging after the ſame manner) as deep as they can, till they come to Water; for the drawing whereof, wanting the help of Engins, known in *Europe*, they can go no deeper, although the Vein lie lower; all lumps of the Mineral they break in pieces, and frequently find Diamonds encloſed in them. To Work on theſe Mines is very expenſive, but the advantage is commonly anſwerable; yet in reſpect of the certain disburſe, that muſt be before any thing be found, they are not ſo much frequented as others, where they may try their Fortunes with a ſmaller Stock. The Earth they dig out is Red: Many large Stones are found here; the ſmalleſt about 6 in a *Mangelleen.* They are mixt Waters, but the greateſt part good, only of ill-favoured ſhapes, many cragged pieces of Stones, ſome as if they had been parts of very great ones, others with pieces broken off them; yet I never heard of any that ever found two ſeeming fellows, although they do thoſe that look as if they had been newly Broken.

In

In *Langumboot* they dig as they do at *Wazzergerree* and *Munnemurg*; the Rock is not altogether ſo ſolid, but the Earth and Stones it produces much alike.

Wootoor ſhould have been placed next to *Currure*, it lying near it, and affording Stones of a like magnitude, ſhapes and waters; 'tis employed only to the Kings uſe: And ſingular, in that its Diamonds are found in black Earth.

Muddemurg far exceeds all the reſt for Diamonds of a delicate Shape, Water, and bright tranſparent Skin, Proud, as it were, in diſcovering their inward Beauties, with which no other Mine can compare; yet it has alſo ſtore of Veiny ones, but thoſe likewiſe of ſo curious Shape and Water, that its difficult to diſcover them from the good, eſpecially the ſmall ones. It produces Stones of divers Magnitudes, from ten and twelve in a *Mangelleen*, to ſix or ſeven *Magelleens* each, and beſides, ſome great ones. The Earth is Red, but its ſeated in the Woods, and the Water ſo bad, that to all (except the People Bred there) it preſently occaſions Fevers and deſtroys abundance, inſomuch that moſt of the Adventurers have forſaken it; notwithſtanding which it hath been more profitable than any of the reſt, the Vein frequently lying near the ſuperficies of the Earth, ſeldom running deep, and is better furniſht than any other yet diſcover'd. The River *Kiſhna*, of excellent waters, is but 9 Miles diſtant; but the Miners or Merchants are either poor that they cannot, or elſe over-awed by the Governour, pretend to be and dare not

be at the charges of fetching their Water from thence. Divers are of the opinion, that, besides the Water, the Town lying in a bottom, enviorn'd with Hills and Moraſs adjoyning, the Air may be infected, and contribute to its unhealthfulneſs.

Melwillee or the *New Mine*, ſo called, becauſe it was but lately found out (or at leaſt permitted to be made uſe of) in the Year 1670. it had then a Year employed the Miners, but it was forbidden, and lay unoccupied till 1673, when complaint being made at *Quoleur*, that the Vein was worn out, the King again licenſed its ſettlement. The Earth they Mine in, is very red, and many of the Stones found there, have of it ſticking to them, as if it had clung there while they were of a ſoft glutinous Subſtance, and had not attained their hardneſs, maintaining its Colour on its Skin (ſeeming to be roughned with it) that it cannot be fetch'd out by grinding on a rough Stone with Sand, which they make uſe of to clean them. The Stones are generally well-ſhaped, their ſize from 5 or 6 in a *mangelleen* to thoſe of 14 or 15 each, and ſome bigger; but greateſt quantities of the middle ſorts: Moſt of them have a thick dull Skin, incline to a yellowiſh Water, not altogether ſo ſtrong and lively as of the other Mines; very few of them of a cryſtalin Water and Skin. They are reported to be apt to flaw in ſplitting, which occaſions theſe People to eſteem them ſomething ſofter than the Product of many of the other Mines; Several that flatter by their ſeeming whiteneſs when rough, diſcover their deceitfulneſs ha-

having past the Mill, and too often a yellowish Tincture, to the disappointment and loss of them that have cut them; but what they want in goodness, is in part supplied by the plenty they find, which, together with their properties, make them the cheaper. This being what I have gathered, both by Experience of several of the places I have seen, and the best Informations I could meet with, of the Mines in this Kingdom; I shall now proceed to those in *Visiapore*.

Visiapore is known to contain Mines enclosing Stones as large and good as those of *Golconda*; but the King, for Reasons already given, makes use but of the meanest: Whereby, as *Golconda* is famous for the largeness of those it affords, *Visiapore* is noted for the smallest; whose Mines, though they seldom or never render an Adventurer a Fortune or Estate at once, as sometimes those of *Golconda* do, by a great Stone or several found together; yet they are more Populous and better employed, the small Stones lying thicker in the Earth, so that the generality are gainers, and few but they get their Expence; whereas those of *Golconda* dig away a considerable Estate and find nothing, others not their Charges, and where one is a gainer, divers lose.

There are 15 Mines employed in the Kingdom of *Visiapore*, viz. *Ramulconeta*, *Banugunnapellee*, *Pendekull*, *Moodawarum*, *Cumerwillee*, *Paulkull*, *Workull*, *Lungeepoleur*, *Pootloor*, *Punchelingull*, *Singarrampent*, *Tondarpaar*, *Gundepellee*, *Donee* and *Gazerpellee*.

In *Ramulconeta* Mines in red Earth, about 15 or 16 Foot deep, they seldom find a Diamond of a *mangelleen* weight, but small to 20 or 30 in a *mangelleen.* They are generally of an excellent Crystalline Water, have a bright clear Skin, inclining frequently to a pale greenish Colour, are well shaped, but few of them, pointed ones. There are also found among them several broken pieces of Diamonds, by the Country People called *Shemboes.*

In *Banugunnapellee*, *Pendekull*, and *Moodawarum*, they dig as at *Ramulconeta*, and in the same kind of Earth; they also afford Stones much alike, being neighbouring Places.

Cummerwillee, *Paulkull*, and *Workull*, are not far distant, produce Stones much alike out of the same coloured Earth, but very small ones even to a hundred in a *mangelleen.*

Lungepoleur Mines are of a yellowish Earth (like those of *Quoleur*,) its Diamonds are generally well shaped, globular, few pointed, of a very good Crystalline Water and bright Skins; many of them have a thick dark Grass-green Skin, some spotted also with Black, that they seem all foul, yet are not so, but within purely white and clean. Their sizes are from 2 or 3 *mangelleens* downwards, but few very small.

Pootloor Mines are of reddish Earth, but afford Stones much like those of *Lungepoleur*, only smaller, under a *mangelleen*; the general sizes are of $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{6}$ of a *mangelleen.*

Pun-

Punchelingull, *Shingarrampent*, and *Tondarpaar*, are alſo of red Earth, their Diamonds not unlike thoſe of *Quoleur*, only rarely or never any large ones are found there.

Gundepellee hath the ſame Earth with the former, and produces Stones of equal Magnitude; but frequently of a pure Cryſtalline Water, wherein they exceed the former.

Donee and *Gazerpellee* dig both in red Earth likewiſe, and afford Stones alike, the greateſt part whereof are of good Shapes and Waters. They have alſo many *Shemboes*, and ſome of bad Waters, ſome brown, which theſe People call ſoft or weak water'd, being eſteemed of a ſofter and weaker Body than others, by reaſon they have not ſo much Life, when cut, and are ſubject to flaw in ſplitting, and on the Mill; their general Product is in Stones of middle Sizes: But *Gazerpellee* has beſides many large ones, and is the only Mine noted for ſuch in the Kingdom of *Viſiapore*. With which concluding the deſcription of the Mines, I ſhall give ſome Account how the Diamonds are found, and how they handle the Earth to find them; which is as followeth.

The Diamonds are ſo ſcatter'd and diſperſed in the Earth, and lie ſo thin, that in the moſt plentiful Mines it's rare to find one in digging, or till they have prepar'd the Stuff, and do ſearch purpoſely for them: They are alſo frequently enclos'd in Clods; and ſome of thoſe of *Melwillee*, the New Mine in the Kingdom of *Golconda*, have the

Earth

Earth ſo fix'd about them, that till they grind them on a rough Stone with Sand, they cannot move it ſufficiently, to diſcover they are Tranſparent; or, were it not for their Shapes, to know them from other Stones. At the firſt opening of the Mine, the unskilful Labourers, ſometimes to try what they have found, lay them on a great Stone, and ſtriking on them with another, to their coſtly experience diſcover they had broken a Diamond. One I knew who had an excellent Stone of 8 *mangelleens*, ſerved ſo by ignorant Miners he employed.

Near the Place where they dig, they raiſe a Wall with ſuch rugged Stones as they find at Hand (whereof all the Mines afford Plenty) of about two Foot high, and ſix Foot over, flooring it well with the ſame; for the laying of which they have no other Mortar than the Earth tempered with Water. To ſtrengthen and make it tight they throw up a Bank againſt the ſide of it: In one whereof they leave a ſmall vent about two Inches from the bottom, by which it empties it ſelf into a little Pit, made in the Earth to receive ſmall Stones, if by chance any ſhould run through. The vent being ſtopped, they fill the Ciſtern they have made with Water, ſoaking therein as much as the Earth they dig out of the Mines, as it can conveniently receive at a time, breaking the Clods, picking out the great Stones and ſtirring it with Shovels, till the Water is all Muddy, the gravelly ſtuff falling to the bottom; then they open the vent, letting out the foul Water and ſupplying

it

it with clean, till all the Earthly Subſtance be waſted away, and none but a gravelly remains at the bottom. Thus they continue Waſhing till about Ten of the Clock before Noon, when they take the gravelly Stuff they have waſhed, and ſpread it on a Place made plain and ſmooth (like a Bowling-Alley) for the purpoſe, near the Ciſtern, which being ſoon dried by the heat of the Sun at that time of the Day, they very curiouſly look it over, that the ſmalleſt bit of a Stone can hardly eſcape them. They never examin the Stuff they have waſh'd but between the Hours of Ten and Three, leaſt any Cloud by interpoſing, intercept the brisk Beams of the Sun, which they hold very neceſſary to aſſiſt them in their ſearch; the Diamonds, not forbearing to reflect them when they touch therein, rendring themſelves thereby the more conſpicuous.

Some of the experteſt Labourers are employed in ſearching; he that ſets them at Work uſually ſitting by, and overlooking; but it's hardly poſſible, eſpecially where many are employed, to watch them ſo narrowly, but that they may ſteal part of what they find, as many times ſome of them do, and, ſelling it privately, convert to their own uſe. If they find a large Stone, they carry it not preſently to their Employer, but keep on looking, having an Eye on him till they obſerve he takes notice of it, when with a turn of their Hand they give him a glimpſe of it, but deliver it not till they

they have done Work, and then very privately, it being the general Endeavour to conceal what they find, leaſt it ſhould come to the Knowledge of the Governour of the Place, and he require a ſhare, which in the Kingdom of *Golconda* is uſually practiced, without reſpect to any agreement made with them.

The Miners, thoſe that employ them, and the Merchants that buy the Stones of them, are generally *Ethnicks*; not a *Muſſelman*, that ever I heard of, followed the Employment. Theſe Labourers and their Employers are *Tellinga*'s, commonly Natives of or near the Place. The Merchants are the *Banians* of *Guzzarat*, who for ſome Generations have forſaken their own Country to take up the Trade, in which they have had ſuch Succeſs, that 'tis now ſolely engroſs'd by them; who correſponding with their Country-men in *Surrat*, *Goa*, *Golconda*, *Viſiapore*, *Agra* and *Dillee*, and other Places in *India*, furniſh them all with Diamonds.

The Governors of the Mines are alſo Idolaters: In the King of *Golconda*'s Dominions a *Tellinga Brammee* Rents moſt of them, whoſe agreement with the Adventurer is, that all the Stones they find under a * *Pagoda* Weight, are to be their own; all of that Weight and above it to be his, for the King's Uſe: But although this Agreement be ſigned and ſealed unto, he minds not at all the Performance thereof, but endeavours

* *A* Pagoda *weight is* 9 Mangelleens.

to

to engross all the Profit to himself, by Tyrannical squeezing both Merchants and Miners, whom he not only Taxes very high, but maintaining Spies among them of their own People, on the least Inkling that they have been any ways Fortunate, he immediately makes a Demand on them, and raises their Tax; else, on a false Pretence they have found a great Stone, drubs them till they Surrender what they have, to redeem their Bodies from Torment. Besides, the Excise is so high on all sorts of Provisions, *Beetle*, and *Tobacco*, which to them is as absolutely necessary as Meat, or at least in their Esteem, that it is thereby raised to double that Price they bear without the Government; and it is furnish'd only by some Licens'd Persons; if any other should endeavour to bring in the least quantity by stealth, he is Fin'd (even for one Leaf of *Tobacco)* if it be a Person of any Repute, or worth any thing, else very severely drubb'd for it; by which Course there is hardly a Man worth five Hundred Pound to be found among them, most of them dealing by Monies taken up at Interest of Usurers, who reside there purposely to furnish them, who, with the Governor eat up their Gains: So that one would wonder any of them should stay, and not betake themselves to Places where they might have better Usage; as there are several in other Governments, and some few that have the Sense to remove; but many their Debts, others hopes of a great hit, detains. Both Merchant

chant and Miner go generally naked, only a poor Clout about their middle, and their Shash on their Heads; they dare not wear a Coat, lest the Governor should say they have thriven much, are Rich, and so inlarge his Demands on them. The Wisest, when they find a great Stone, conceal it till they have an opportunity, and then with Wife and Children run all away into the *Visiapore* Country, where they are secure.

The Government in the *Visiapore* Country is better, their Agreement observ'd, Taxes easier, and no such Impositions on Provisions; the Merchants go handsomly Clad, among whom are several Persons of considerable Estates, which they are permitted to enjoy peaceably, by reason whereof their Mines are much more Populous and better employed than those of *Golconda.*

It is observable, that notwithstanding the Agreement with the Adventurers of the Mines, that all Stones above a certain Weight shall be for the King's Use; yet in the Metropolis of either Kingdoms, as the Cities of *Golconda* and *Visiapore* are, there is no seizure, all Stones are free, and the late deceased King, *Abdull Cutopshaw* of the former, and *Edelshaw* of the latter, would not only give very great Prices for large Stones, but richly Vest, and present the Merchant that Sold them with Horses or something else of Value, thereby encouraging others to bring the like. But the present King of *Visapore*

is

is a Child, and the King of *Golconda*'s Delights solely pleased on light Women-Dancers, and Trick-Shewers, that he neither minds *Diamonds*, nor many things more necessary, committing the Government of his Kingdom to a *Tellinga Braminee*, which the *Musselmen* not well resenting, does in some measure threaten the stability of his State.

A Letter from the Eaſt Indies, *of Mr.* John Marſhal *to Dr.* Coga, *giving an Account of the Religion, Rites, Notions, Cuſtoms, Manners of the Heathen Prieſts commonly called* Bramines. *Communicated by the Reverend Mr.* Abraham de la Pryme.

Worthy Sir,

THE laſt time that I had the happineſs to be in your good Company, and to partake of thoſe Favours and Bleſſings that your Goodneſs was pleaſed liberally to beſtow upon me and our Companions, at our departure, and as it were Exile from our Native Land, does ſo loudly call out for ſome recompence or other at our Hands, that I cannot without the greateſt Ingratitude imaginable, let ſlip this (tho' ſudden) opportunity of Writing unto you, and preſenting of you at this time with what I underſtand you more value than all the Riches of the Eaſt; to wit, a few Specimens of the Knowledge of thoſe People whom we ſtile Barbarians, Heathens and Idolaters, which I have read in their

their own Books, and gather'd from the mouths of those that have been the greatest Speakers and Preachers among them. I have always had a profound Veneration for the Dictates of Nature, and the universal Traditions of Nations, for hereby are Infinite Things to be learned, for the establishing of our Glorious Religion against Atheists, and the more easie propagation of the same among Infidels and Heathens.

Upon what account or grounds it is that some Travellers have stiled these People Polytheists, or Atheists, I cannot tell; or whether there be any such People at all in the World, except some of the base common sort in all Nations, I much question? It is very observable here, that their Priests, or *Bramines*, and Holy Men, whom they call *Jagees*, when they have occasion to Write any thing they always put a figure of one in the first place, to shew, as they say, that they acknowledge but one God, whom they say is *Burme*, that is, Immaterial. When they preach to the People, and Instruct them, which is commonly every Feast-day, full Moon, or the time of an Eclipse of either Luminary, they tell the common People much of God, Heaven and Hell, but very Imperfectly, Obscurely and Mystically. They say that when God thought of making the World, he made it in a minute.

They account this World the Body of God, for all that they say he's Immaterial; and say that the Highest Heavens are his Head, the Fire his Mouth, the Air his Breath and Breast, the Water his Seed, and the

Earth and the foundations thereof his Legs and Feet. But aſſert in general that God is the Life of every thing, yet is the thing neither greater nor leſs for him.

They hold that God dwelt in a Vacuity before that he created the World, and that as he dwelt in that Vacuity he created ſeveral Beings out of himſelf, the firſt were Angels, the ſecond Souls, the third Spirits, all differing in degrees of Purity, the firſt being more pure than the ſecond, and the ſecond than the third. The Angels, they ſay, neither act Good nor Evil, the Souls either Good or Evil, but the Spirits, or *Dewta's*, as they call them, act ſcarce any thing but Evil.

They have a good Opinion of the Angels, and think their State mighty happy, hoping that when they dye they ſhall be be made partakers of the ſame Bliſs and Pleaſure.

They believe that every thing that hath Life hath a Soul, but eſpecially Man; and they accordingly affirm, that as theſe Souls behaved themſelves in their pre-exiſtent State, ſo are their Actions in this World either good or bad, by a ſort of fatal Neceſſity, which is very hard to conquer, or to overcome. Hence it is, ſay they, that there are ſo many different Humours and Diſpoſitions of Men, for their Souls, before their entrance into their Bodies, being tainted with different Affections, cauſes the like differences in the Parties, whoſe Bodies are their Vehicles. So that if a Man happen to have a ſuddain or unfortunate Death, they

they immediately ascribe the same to the Party's own Wickedness, or the bad Life that his Soul led before that it enter'd into his Body. For, say they, the afore-acted Evil that his Soul did in its other Life, brought these accidents upon him, by getting the upper hand of him, and by being too powerful and strong. And those that dye thus, they believe that their Souls turn immediately into Devils. They mantain *Pythagoras*'s Transmigration, or *Metempsycosis*, but in a grosser sense than he did. For they believe that Mens Souls, that have not lived so well as they ought, go as soon as the Body dyes not only into Birds and Beasts, but even into the basest Reptiles, Insects and Plants, where they suffer a strong sort of purgation, to expiate their former Crimes: But as for the Souls of the *Jogees*, or *Fuche's*, that is, of Religious Men and Saints, they fancy that they go and inhabit with the good *Dewta*'s, or Angels, among the Stars.

As for the Spirits, or Inferiour Angels, they believe that they are very evil, and have a hand in all Wickednesses, Murders, Wars, Storms, and Tempests; so that when they solemnize the Funerals of those that are dead, they always present Dishes of Meat, as Offerings unto those Spirits, and sometimes Sacrifice unto them, that they may not hurt the Souls of the Dead.

As they acknowledge the being of a mighty God, so they hold that he created the World, and every thing therein. They believe that there are almost infinite num-

ber of Worlds, and that God has oftentimes Annihilated and Re-Created the ſame. But how he came firſt to Create the World and Mankind, they relate to have been thus— Once on a time (ſay they) as he was ſet in Eternity, it came into his mind to make ſomething, and immediately no ſooner had he thought the ſame, but that the ſame Minute was a perfect Beautiful Woman preſent immediately before him, which he called *Adea Suktee*, that is, the firſt Woman: Then this figure put into his mind the figure of a Man; which he had no ſooner conceived in his mind, but that he alſo ſtarted up, and repreſented himſelf before him; this he called *Manapuiſe*, that is, the firſt Man; then upon a reflection of theſe things, he reſolv'd further to create ſeveral places for them to abide in, and accordingly aſſuming a ſubtil body, he Breath'd in a Minute the whole Univerſe, and every thing therein, from the leaſt to the greateſt.

They conſtantly believe that the Univerſe cannot poſſibly laſt longer than 71 *Joog's*, which is a meaſure of time with them, and is .... years. Which when it is come, God does not only annihilate the whole Univerſe, but even every thing elſe, as well Angels, Souls, and Spirits, as Inferiour Creatures; and then he remains in the ſame State that he was in before the Creation; But ſay, that after he has a while reſpired thus he Breaths again, and every thing is Created afreſh, as well Angels and Souls, as all other things; but as for the Spirits, they

they are no more thought of. Yet for all this, after 71 *Joogs* more all is Annihilated again. How many *Joogs* are past since the World was last Created they cannot certainly tell; only 'tis observable that in an Almanack of theirs, written in the *Sanscript* Language in 1670, they make the World then 3892771 years old from its last Creation,

The *Bramines* of *Persia* tell certain long Stories of a great Gyant that was led into a most delicate Garden, which upon certain conditions should be his own for ever. But one evening in a cool shade, one of the Wicked *Dewta's*, or Spirits, came to him, and tempted him with vast sums of Gold, and all the most precious Jewels that can be imagined; but he courageously withstood that temptation, as not knowing what value or use they were of: But at length this wicked *Dewta* brought to him a fair Woman, who so charm'd him, that for her sake he most willingly broke all his Conditions, and thereupon was turned out.

They tell a great many Stories Absurd and Ridiculous enough, of the first Ages of this present World, which would be too tedious here to take notice of; only I shall here give you out of one of their own Books what they tell us of a great Flood that formerly happened. They say, that about 21000 Years ago the Sea overwhelm'd and drowned the whole Earth, except one great Hill, far to the Northwards, called *Bindd*, and that there fled thither only one Woman and seven Men, the names of whom

were *Dehoolah*, *Sunnuk*, *Sunnaud*, *Trilleek*, *Sannotah*, *Cuppyloſhaw*, *Suraſchah* and *Burroopung*; theſe underſtanding out of their Books that ſuch a Flood would come, and was then actually coming, prepaired againſt the ſame, and repaired thither; to which place alſo went two of all ſorts of Creatures, Herbs, Trees, and Graſſes, and of every thing that had Life, to the number in all of 1800000 living Souls. This Flood (ſay they) laſted 120 Years, 5 Months and 5 days: After which time all thoſe Creatures that were thus preſerved, deſcended down again and repleniſhed the Earth: But as for the 7 Men and Women, only one of them came down with her, and dwelt at the Foot of the Mountain, the other ſix turned *Fuchee's*, or Holy Men, and ſpent there the remainder of their days.

They hold in general the *Ptolomaic* Syſtem of the Univerſe, and ſay that there are 8 or 9 Heavens, counting the Air and Earth, every one exceeding another in Beauty and Glory.

Their Religion conſiſts of nothing that I could ever ſee or learn, but the leading of a Pure Life, the Waſhing away of their Sins in the River *Ganges*, their muttering over of divers Prayers, and their doing of ſtrange and incredible Penances.

They ſay, that God is ſuch a one, that whoſoever ſeeks him, let it be after what manner he pleaſes, whether by thinking that the Sun is he, or the Moon, or the like, if they do it but ſincerely and honeſtly, with a right affected heart, they ſhall be received of him.

They

They report, that on a time a *Muſſulman* ſeeing a *Hindoo*, or Pagan Prieſt, in Heaven, he ask'd God how that Infidel came to have admittance thither, whom *Mahomet* ſo often calls by the name of Bitter Roots? To whom God anſwered, What if a Bitter Root bring forth ſweeter Fruit than any of you, why ſhould I not receive it? Upon which the *Muſſulman* had no more to ſay.

They hold, that ſuch as ſuffer not their minds to wander after the luſts of the World are perfect *Jogees*, or Saints, and hold that God is always preſent with them in all their actions.

It is to be found in many of their Books, that there was a time, a good while ago, in which God took upon him the ſhape of a Man, and ſpent many Years in reforming the world, and giving better rules to walk by than had been before: but at length having left them, they ſoon forgot him and his Rules, and returned to their former courſes; upon which he told them that he would leave them to their ways, and never undertake any ſuch thing again.

The Religious at ſome certain Seaſons of the Year come unto the River *Ganges* (which they call the Holy River) in vaſt multitudes, even from many parts of *Tartary*, to waſh away their ſins, and make expiation for their faults.

This *Gangees* is a delicate fine River chiefly for the ſake of its moſt ſweet, pure and clear Waters, which have got it the greateſt eſteem of any River in the Eaſt. I have oftentimes ſail'd many Miles up it, and have

found it in ſome places not to be above a Mile broad, in others not half ſo much, and in one or two places not above one eighth of a Mile. In *April*, when the Water is at the loweſt, it is almoſt dry in many places; but when it is at the higheſt, which is commonly about the middle of *September*, it is very deep, and many Miles broad.

When the People are here gather'd together, they have a great many ſtrange Cuſtoms and Ceremonies, and pay a kind of Divine Honour and Worſhip to the River, too long and tedious here to mention. The *Hindoo's* and *Bramines* preach then every day to the people, teaching them their Duties, and ordering them to ſay ſuch and ſuch Prayers; but above all things to be Charitable to the poor and needy.

It is reported, that upon the Hills by *Caſmere* there are men that live ſome hundreds of Years, and can hold their Breaths, and lye in Trances for ſeveral Years together, if they be but kept warm; and that every year ſome of them come down unto the People at *Ganges*, and do many great Cures; for whom they have ſuch a Veneration, that they frequently drink the Water they waſh their Sweaty Feet in.

The Penances and Auſterities that they undergo are almoſt incredible; moſt of them, through their continual Faſtings, and lying upon the parching hot Sand in the Heat of the Sun, are ſo Lean, Dry'd and Wither'd, that they look like Skeletons or Shadows, and one can ſcarce perceive them to breath, or feel their Pulſe beat.

When

When any great Man dyes among them, but eſpecially any of their *Jogee*'s or Saints, they make great preparations for their Funeral; the Corpſe is laid on its Belly, and Salt and Rice laid round about it at every corner of the Ground. Then the neareſt Relations to the Party deceaſed carry a Pot of Water on their Shoulders ſeveral times about the Funeral Pile, when they burn them, then breaking it in pieces, ſpills the Water. Which Ceremony being ended, the Pile is fired, and then all the Relations begin to howl, and embrace one another, then waſhing themſelves in ſome Neighbouring River, they depart every one to his Home; and as for the remaining Aſhes, if he be Rich they gather them up, and caſt them into the *Ganges* or the Sea.

Sometimes it happens that the Wife of the deceaſed Party, if ſhe have no Children, and be old, or ill to live in the World, will burn her ſelf with the dead Body; but this happens very ſeldom. It is ſaid, that in ſuch caſes the *Bramines* give the Woman a ſtupifying Liquor, which by the time that they are in the Fire makes them ſenſeleſs of any Pain.

To know into what Body the Soul of the deceaſed is tranſmigrated they do thus; they ſtrew the Aſhes of the Dead upon the Place where he was firſt laid after his Death, and handfuls of odoriferous Flowers about the ſame, and returning again in 44 Hours, they judge by ſome pretended Impreſſion or other in the Aſhes, into what Body it is gone: If the Foot of an Horſe, or Dog, or Ox, or

ſuch

such like appear, then they certainly give out that it is gone into such like Creatures; but if nothing appear, then they think it is certainly gone to the Starry Regions.

As for their Learning and Knowledge it is but little; they have indeed several Books writ in divers Languages, but they contain nothing but a great deal of Stuff and Cant about their Worship, Rites and Ceremonies.

They are ignorant of all parts of the World but their own; they wonder much at us, that will take so much Care and Pains, and run thro' so many Dangers both by Sea and Land, only, as they say, to uphold and nourish Pride and Luxury. For, say they, every Country in the whole World is sufficiently endow'd by Nature with every thing that is necessary for the Life of Man, and that therefore it is madness to seek for, or desire, that which is needless and unnecessary.

The last time that I was at *Modufferpore* in *Indostan*, I had a great deal of talk with a *Bramine* somewhat more Learned than any of the rest, his Name was *Ramnaunt*; he told me a great many Secrets in Physick, and told me many Traditions and Stories. He says, that if you bury a piece of Mony for some considerable time in the Mouth of a live Frog, and then dig it up again at Midnight, that this piece of Money, to whomsoever you give or pay it, will always return to you again.

He says, that if the little Worm in the Wood *Lukerakera* be cut in two, and the one part stirs and the other not, if the stirring part be bruised, and given with half a Beetle

to

to a Man, the other half to a Woman, this Charm will keep them from ever lying absent one from the other.

They have Books full of the like absurdities, and Cabalistick complication of Figures; as for Example, if you write these following Numbers, 28, 35, 2, 7.——6, 3, 32, 31—34, 29, 8, 1,—4, 5, 30, 33. in the squares of a square Figure, and your Enemies Name under it, and wear it always about you, your Enemy shall never be able to hurt you.

So if you write the following Figures in the like manner upon the left Hand, 2, 9, 2, 7—6, 3, 6, 5,—8, 3, 8, 1—4, 5, 4, 7— with Turmerick, and wash the same off with fair Water of *Ganges*, and drink it, it will cure all manner of Venomous Bitings.

Multitudes of such like ridiculous Fancies they have; all which they seem to have borrowed from the *Cabala* of the *Saracens*, which is full of such like.

I lately heard a *Bramine* say, that if some of the pieces or knots of the Cloath) in which a Woman hath been burned with her Husband) be saved, and made up in the form of a Wick, and fitted for a Lamp, and lighted, and set in a dead Womans Skull, that it would make the dead Party appear. This he said he had done, but I did not believe him.

When they have any mad Men among them, they take them and put them into a close Room, just big enough to hold them, and almost Smoke them to Death with Musk and cold Smells, which soon brings their Brains into their right temperature, and so recover them, *&c.*

There

There happen'd two things in our Voyage hither which I thought very observable tho' perhaps they may not be unknown to you— The first was, that all our Tornadoes brought much Rain with a stink; and if the Sea-men did but lay their Cloaths by for 24 Hours, they became all full of little Maggots. The second is, When we came out of *Europe* we took in some Water at St. *Jago*'s, and when we were almost at our Journeys end, our Cooper going with a Candle to open one of the Casks, he had no sooner done it, but the Water immediatly took Fire, and burnt his Face, Hands and Fingers; but he suddenly turning about quench'd the same, by setting his Britch on it. It stunk pretty much also at the same time, but afterwards came to its native Sweetness, *&c.*

I am yours, &c.

Jo. Marshal.

Part

Part of two Letters to the Publisher from Mr. James Cunningham, *F.R.S. and Physician to the* English *at* Chusan *in* China, *giving an account of his Voyage thither, of the Island of* Chusan, *of the several sorts of Tea, of the Fishing, Agriculture of the* Chinese, &c. *with several Observations not hitherto taken notice of.*

SIR,

MY last to you was from the Island of *Borneo*, in which I gave you an account of our arrival there the 17th of *July*, where we staid but two Days, the Season of the Year being so far past, and from thence made the best of our way through the Streights of *Banca* with favourable Winds and Weather, till we came on the Coast of *China* the 13th of *August*, then we had variable Winds which carried us abrest of *Emuy* the 19th following, at which time the North East Winds setting in fresh, put us in great fears of losing our passage; whereupon we were forced

forced to turn it up against Wind and Current all the Way, the Weather so favouring us, that we were never but by our Topsails, else we should have lost more Ground in one Day, than we could have gain'd in eight. The last of *August* we came to an Anchor under the *Crocodile* Islands, both to shelter us from the bad Weather, (which is generally expected on this Coast at new and full Moon, and has been fatal to a great many Ships) and also to look for fresh Water, which was now grown scarce with us, not having recruited since we came from the Cape of *Good Hope*: These are three small Islands lying in the Latitude of 26 Degrees, about six Leagues from the River of *Hocksieu*; on *two* whereof we found very good fresh Water, with a convenient Watering-place on the South West side of the innermost of the *three*; and by the assistance of a few *Chinese* Fisher-men we procured some fresh Provisions from the mainland, because we did not reckon it safe to adventure our selves thither, lest we should have been brought into Trouble by the Government there. While we lay here, on the fifth of *September* we had a suddain short shift of the Monsoon to S. W. the fury whereof others felt, in coming upon the Coast of *China* at the same time. The 8th of *September* we put to Sea again, turning to Windward Night and Day without all the Islands, which are very numerous along this Coast, to which we were altogether strangers beyound *Emuy*, and the Hydrography thereof is hitherto so imperfect, that there

there was no trusting to our Drafts, which made our Navigation somewhat more dangerous: However, on the first of *October* we got into the Latitude of 30 Degrees, where we came to an Anchor near the Land, until we found the way by Boat to *Chusan*, about 12 Leagues within the Islands; from whence we had a Pilot, who carried us safely thither on the 11th of *October*. Upon this Island the *Chineses* have granted us a Settlement and Liberty of Trade, but not to *Ning-po*, which is 6 or 8 hours sail to the Westward, all the way among Islands; this being the largest, is 8 or 9 Leagues in length from East to West, and 4 or 5 Leagues in breadth; about 3 Leagues from that point of the Main-Land called Cape *Liampo* by the *Portugueze*, but *Khi-tu* by the *Chinese*: At the West End of this Island is the Harbour very safe and convenient, were the Ships ride within call of the Factory, which is built close by the shore on a low plain Valley, with near 200 Houses about it for the Benefit of Trade; inhabited by Men, whose Jealousie has not as yet permitted them to let their Wives dwell here; for the Town were they are, is $\frac{3}{4}$ of a Mile further from the Shore, enviorn'd with a fine Stone Wall, about 3 Miles in Circumference, mounted with 22 square Bastions placed at irregular distances, besides 4 great Gates, on which are planted a few old Iron Guns, seldom or never used: The Houses within are very meanly built: Here the *Chumpeen* or Governour of the Island lives, and betwixt three and four thousand beggarly Inhabitants, most part Souldiers and Fish-

Fishermen; for the Trade of this place being newly granted, has not as yet brought any considerable Merchants hither. The Island in general abounds with all sorts of Provisions, such as Cows, Buffalo's, Goats, Deer, Hogs wild and tame, Geese, Ducks and Hens; Rice, Wheat, Calavances, Coleworts, Turnips, Potatoes, Carrots, Beetes and Spinach; But for Merchandize there's none but what comes from *Ning-po*, *Hang-cheu*, *Nankin* and the Inland Towns, some of which I hope to see, when I have acquir'd a little of the *Chinese* Language. Here also the Tea grows in great plenty on the tops of the Hills, but it is not in that esteem with what grows on more Mountainous Islands. Altho this Island is pretty well stor'd with People, yet its far from what it was in *F. Martinius*'s time, whenh e describes *Cheuxan*: and this puts me in mind, that the Superstitious Pilgrimages thereto, mention'd by him, must be meant of the Island *Pou-to*, which lies 9 Leagues from hence, and 3 Miles to the Eastward of this Island, whither (they say) the Emperour designs in the Month of *May* next (being his Birth-day, and the 40th Year of his Age) to come to worship in an Ancient Pagod there, famous for Sanctity; having sent one of his *Bonzes* already thither to get all things in order.

Chusan,

Chusan, Novemb. 22. 1701.

SIR,

I Formerly told you, that the Emperor design'd to have come to the Island of *Pou-to* (a place of great Devotion) to worship in the Month of *May* last, being the 40th Year of his Age, I should have said of his Reign; but all things being prepared there for his Reception, he was dissuaded from his purpose by some of his *Mandarines*, who made him believe that the terrible Thunder there was very dangerous. This *Pou-to* is a small Island about 5 Leagues round at the East end of this Island, famous for the Superstitious Pilgrimages made thither for the space of eleven hundred Years: It's inhabited only by *Bonzes*, to the number of 3000, all of the Sect call'd *Hoshang*, or unmarried *Bonzes*, who live a *Pythagorean* Life; and there they have built 400 Pagodes, two whereof are considerable for their greatness and finery, being lately covered with green and yellow Tiles brought from the Emperor's Palace at *Nankin*, and inwardly adorn'd with stately Idols finely grav'd and gilded, the chief whereof is the Idol *Quon-em*. To these two great Pagodes belong two chief Priests, who govern all the rest. They have several Ways and Avenues cut through the Island, some whereof are pav'd with Flag-stones, and over-shaded with Trees planted on each side: Their dwellings are the best I have yet seen in these Parts. All which are

maintain'd by Charitable Devotions; and the Junks which go from *Ning-po* and this place to *Japan*, touch there both going and coming, to make their Offerings for their good Success. There is another Island call'd *Kim-tong* 5 Leagues hence in the way to *Ning-po*, whither, they say, do retire a great many *Mandarins* to live a quiet Life after they have given over their Employments; on that Island also are said to be Silver Mines, but prohibted to be open'd. The rest of the circumjacent Islands are either desert, or meanly inhabited by a few fishing People, but all of them stor'd with abundance of Deer. For it is not long since this Island of *Chusan* began to be Peopled; it's true, in *Martini*'s Days, about 50 Years ago, it was very Populous for the space of three or four Years, at which time the fury of the *Tartarian* Conquest was so great, that they left it desolate, not sparing so much as the Mulberry Trees (for then they made a great deal of raw Silk here) and in this condition it continued till about 18 Years ago, that the Walls of the Fort or Town, which now is, were built by the Governor of *Ting-hai*, for a Garrison to expel some Pyrats, who had taken shelter here. About 14 Years ago, the Island beginning to be peopled, there was a *Chumpeen* or General sent to govern it for three Years, to whom succeeded the late *Chumpeen* (who procur'd the opening of this Port to Strangers) whose Government continued till *April* last, being translated to be *Chumpeen* of *Tien-cing Wei* near to *Pekin*, and was succeeded by the present *Chumpeen*, who is Son to the Old *Chunkoon* of *Emuy*.

They

They have got no Arts or Manufactories here, but making of lacker'd Ware, a particular Account whereof I cannot as yet send you. They begin to Plant Mulberry-Trees, to breed up Worms for the Production of raw Silk; and they make some Tea, but chiefly for their own use.

Altho' the following Particulars contain nothing of extraordinary matters in them, yet such as they are, you may take, till I can procure you better.

The three sorts of Tea commonly carry'd to *England* are all from the same Plant, only the Season of the Year, and the Soil, makes the difference. The *Bohee* (or *Voiii*, so call'd of some Mountains in the Province of *Fokien*, where it is chiefly made) is the very first bud gather'd, in the beginning of *March*, and dry'd in the Shade. The *Bing* Tea is the second growth in *April*: and *Singlo* the last in *May* and *June*, both dry'd a little in *Tatches* or Pans over the Fire. The Tea Shrub being an ever-green, is in Flower from *October* to *January*, and the Seed is ripe in *September* and *October* following, so that one may gather both Flowers and Seed at the same time; but for one fresh and full Seed, there are a hundred nought; these make up the two sorts of *Fruit* in *Le Compte*'s description of Tea: As for his other sort, which he calls slymic Pease, they were nothing but the young Buds of the Flowers not yet open. It's Seed-Vessels are really *Tricapsular*, each *Capsula* containing one Nut or Seed, and altho' two or one *Capsula* only comes to Perfection, yet the Vestiges of the rest may be discerned.

cerned. It grows in a dry gravelly Soil, on the sides of Hills in several places of this Island, without any Cultivation.

Le Compte is mistaken in saying (*pag.* 96.) that the *Chinese* are wholly Strangers to the Art of Grafting, for I have seen a great many of his Paradoxical Tallow-Trees ingrafted here, besides some other Trees. When they Ingraft, they do not slit the Stock as we do, but cut a small slice off the outside of the Stock, to which they apply the Graft (being cut sloping on one side, agreeable to the slice cut from the Stock) bringing up the Bark of the slice upon the outside of the Graft, they tie altogether, covering with Straw and Mud as we do.

The Commentator on *Magalhen* seems doubtful in the length of the *Chinese Che* or Cubit. Here they have two sorts, one of 13 $\frac{7}{10}$ *English* Inches, which the Merchants commonly use: The other is of eleven Inches, us'd by Carpenters, and also in Geographical Measures.

Albeit *F. Martini* is censur'd by *F. Magalhen* for spelling a great many *Chinese* Words with *ng*, which the *Portuguese* and others have done with *m*, yet his way is more agreeable to the *English* Pronunciation, only in some Words the *g* may be left out, as in *Pekin*, *Nankin*, &c.

Having made enquiry about *Martini*'s Account of Sowing their Fields at *Ven-cheu* with Oyster-shells, to make new ones grow; I was told that after they have taken out the Oysters, they sprinkle the Shells with Urine, then putting them into the Water again, there grows new Oysters on the foresaid Shells.

Martini

Martini says he could never find a *Latin* Name for the *Fula Mogorin* of the *Portuguese*, I'm sure it's the same with the *Syringa Arabica flore pleno albo in Parkinsone.* He says also, that the *Kieu-yeu* or Tallow-tree bears a white Flower like a Cherry-tree; but all that I have seen here bears a spike of small yellow Flowers like the *julus* of a *Salix.*

The Bean, or *Mandarin* Broth, so frequently mentioned in the *Dutch* Embassy and other Authors, is only an Emulsion made of the Seed of *Sesamum* and hot Water.

Their chief Employments here are Fishing and Agriculture.

In Fishing, they use several sorts of Nets and Lines as we do; but because they have large Banks of Mud in some Places, the Fisherman, to go more easily thereon, has contriv'd a small frame about 3 or 4 Foot long, not much larger than a Hen-trough, elevated a little at each end, in which he rests upon one Knee, leaning his Arms on a cross Stick, rais'd so high as his Breast, and putting out the other Foot often upon the Mud, he pushes forward his Frame thereon, and so carries himself along in it.

As to their Agriculture, all their Fields (where any thing is planted) whether high or low, are made into such Plots as may retain the Water on them when they please. They Plow up their Ground with one Buffelo or one Cow. Where they are to Sow Rice, they prepare the Fields very well, by clearing it of all manner of Weeds, moistning to a Pulp, and smoothing it with a Frame drawn across; on which they Sow the Rice very thick and co-

ver it only with Water for two or three Inches high, and when it has grown 6 or 8 Inches long, they pull it up by the Roots, and tranſplant it (by Tufts in a ſtraight line) to Fields overflown with Water; and where a Field is ſubject to Weeds, when the Water drys up, they prevent their growth in overturning the Mud with their Hands in the interſtices where the Rice is planted. When they Sow Wheat, Barley, Pulſe, and other Grains, they grub up ſome ſuperficial Earth, Graſs and Roots, and with ſome Straw they burn all together; this Earth being ſifted fine, they mix with the Seed, which they Sow in holes made in a ſtrait Line, and ſo grows up in Tufts as the Rice does; the Field being divided into Beds and harrowed over, both before and after the Seed is Sown: This makes them ſomewhat reſemble Gardens. Altho' they meliorate their Fields, where they Sow Rice, only by letting the Water on them, yet for other Grains, where Ground requires it, they make uſe of Dung, Human Excrements, Aſhes, *&c.* In watering their Fields here they uſe the ſame Inſtrument mention'd by *Martini* in the Preface to his Atlas, being all of Wood, and the contrivance the ſame with that of a Chain-Pump.

Their method in making of Salt is this: All the Shores here being Mud, inſtead of Sand, in the Summer Seaſon they pare off the ſuperficial Earth, which has been over-flown with the Salt Water, and lay it up in heaps for uſe; when they are to uſe it they dry it in the Sun, rubbing it ſmall; then digging a Pit, they cover the bottom thereof with Straw, at which

which thro' the side of the Pit they pass a hollow Cane, that leads into a Jar, which stands below the level of the Pits bottom; they fill the Pit almost full with the foresaid Earth, and pour Salt Water thereon, till it be covered two or three Inches with Water, which drains through, into the foresaid Jar, and is afterwards boil'd into Salt.

Had I not found the Printed News Papers last Year take notice of a singular Root brought from *China* by *F. Fontaney*, I should not have told you, that I have seen one since I came here call'd *Hu-chu-u* (which I take to be the same) whereto they ascribe wonderful Properties of prolonging Life, and turning grey Hairs into black, by drinking its Infusion for some time, insomuch that they say it's to be had in value from 10 *Tael* to 1000 or 2000 a single Root; for the larger it is, the more is its value and efficacy: Which is too much Money here to try the Experiment. You have it mention'd in *Cleyer*'s *Medicina Sinica* No. 84. under the Name of *Ho-xeu-u*, according to the *Portugal* Spelling: It's likewise painted in the 27th Table of those Plants Mr. *Petiver* had of me. If you'll have the Story of its Discovery, which I will not warrant for Gospel, it runs thus. Upon a time a certain Person going a Simpling among the Mountains, fell by accident into such a steep Valley that he could by no means get out of it again; whereupon looking about for something to sustain his Life; in this melancholy condition, he espy'd this Root, of which he made Tryal; and found that in eating thereof, it serv'd him both for Provisions and

Cloathing, by keeping his Body in ſuch a temperature, that the Injuries of the Weather had no influence upon him during his ſtay there, which was ſome hundreds of Years; till at laſt an Earthquake happen'd in that place, whereby the Mountains were rent, and he found a paſſage out to his Houſe, from whence he had been ſo long abſent: But the many alterations that came to paſs there in ſuch a ſpace of time, would not permit them to give Credit to his Story; till conſulting the Annals of their Family, which gave an Account of one of them loſt at that time, they were confirm'd in the truth of his Relation. And ſo much for this.

A Letter from Mr. John Clayton *Rector of* Crofton *at* Wakefield *in* Yorkshire, *to the Royal Society*, May 12. 1688. *giving an Account of several Observables in* Virginia, *and in his Voyage thither, more particularly concerning the Air.*

HAving oftentimes been urged to give an Account of *Virginia*, by several of the Worthy Members of the Royal Society, I cannot but, as far forth as I am able, obey Commands whereby I'm so much honour'd, and show my Respect by my ready Compliance; tho' I am so sensible of my own Weakness and Incapacity to answer your Expectations, that before-hand I must Apologize for my self. And indeed by Sea I lost all my Books, Chymical Instruments, Glasses and Microscopes, which rendred me uncapable of making those Remarks and Observations I had designed, they were all cast away in Captain *Win*'s Ship, as they were to follow me; and *Virginia* being a Country where one cannot furnish ones self again with such things, I was discourag'd from making so diligent a Scrutiny as otherwise I might have done,

done, so that I took very few Minutes down in Writing; and therefore, since I have only my Memory to rely on, which too has the Disadvantage of it's own Weakness, and of the distance of two Years since now I left the Country, if future Relations shall in some small Points make out my Mistake, I thought this requisite to justifie my Candor; for I ever judg'd it villanous to impose in matters of Fact; but Descriptions of things that depend on Memory may be liable to Mistakes, and yet the sincerity of the Person that delivers them intire. But hereof I shall be as cautious as possible, and shall rather wave some things whereof I have some Doubts, and am uncapable now of satisfying my self, than in any sort presume too far. The method I design is, First, to give an Account of the Air, and all such Observations as refer thereto; then of the Water, the Earth and Soil; the Birds, the Beasts, the Fishes, the Plants, the Insects; and lastly, the present state of the Inhabitants: But at present I shall neither trouble you nor my self with any more than an Account of what refers to the Air alone, being conscious the Honourable Society may receive such a Glut with the Imperfection of this, as to excuse me from a farther Relation.

But before I begin, perhaps it may not be impertinent to acquaint you with some things that happen'd in our Voyage. We sail'd in the Ship *Judith*, Captain *Trim* Commander, 'twas Fly-boat built, about 200 or 250 Tuns; she sprung a considerable Leak. When the Captain had made long and diligent Search,

had

had tried all methods that Sea-men use upon such occasions, or he could think of, all in vain, and that the Leak encreased, he came pensively to consult me. Discoursing with him about it, and understanding that the Ship was Cieled within; so that though the Leak might possibly be in the fore-part, it would fill the whole Cavity betwixt the Cieling and the Planks, and so run into the Hold at all the Crevices of the Cieling up and down: I thereupon conceive, that where it burst in betwixt the Cieling and the Planks, it must needs make some Noise. He told me, they had endeavoured to find it out that way, and according to custom had clapt Cans to their Ears to hear with; but the working of the Ship, the Tackle and the Sea made such a Noise, that they could discover nothing thereby. I happily bethought my self of the Speaking Trumpet; and having one which I had contrived for some other Conveniences, of a differing shape from the common sorts, I bid him take it and apply the broad end to the side of the Ship, the narrow end to his Ear, and it would encrease his Hearing as much as it augmented the Voice the other way, and would ward the Ear too from the confusion of foreign Noise. Upon the first application, accordingly they heard it, tho' it happened to be at a considerable distance; and when they removed the Trumpet nigher, they heard it as if it had been the Current of a mighty River, even so distinctly, as to have Apprehensions of the bigness and figure of the Hole that the Water came in at; so that cutting there the Seeling of the Ship, they immediately stopt the Leak. In

In the Sea I saw many little things which the Seamen call Carvels; they are like a Jelly or Starch that is made with a cast of Blue in it; they Swim like a small Sheeps Bladder above the Water, downwards there are long Fibrous Strings, some whereof I have found near half a yard long. This I take to be a sort of Sea-Plant, and the strings its Roots growing in the Sea, as Duck-weed does in Ponds. It may be reckon'd among the Potential Cauteries; for when we were one day becalm'd, getting some to make Observations thereof, the sportful People rub'd it on one anothers Hands and Faces, and where it touch'd it would make it look very Red, and make it smart worse than a Nettle. In my return for *England* we struck a Hauksbill Turtle, in whose Guts I found many of these Carvels; so that it's manifest they feed thereon. 'Tis commonly asserted by the Seamen, that they can smell the Pines at *Virginia* several Leagues at Sea before they see Land, but I could receive no Satisfaction as to this Point; I could not discern any such thing when at a moderate distance, I fear much of this may be attributed to Fancy; for oneDay there came three or four full scent to tell me they were certain they smelt the Pines; but it afterwards prov'd that we were at that time 200 Leagues from the Shoar, so that I was satisfied that was therefore meer Fancy. Indeed we thought, by the general Accounts of the Ship, that we had been just on the Coast, but all were deceived by a Current

we

we met with, that at that time ſet about South-Eaſt, or Eaſt South-Eaſt, which when once becalmed we tried thus: We hoiſed out a Boat, and took one of the Scuttles that cover'd one of the Hatches of the Ship, tying thereto a great Weight, and a ſtrong long Rope, we let it ſink a conſiderable depth, and then faſtning it to the Boat, it ſerv'd as an Anchor, that the Boat could not drive; then with the Glaſs and logg Line we found the Current ſet, as I ſay, Eaſtward, at the rate of a Mile and a half an Hour. This Current is of miſchievous Conſequence, it does not always run one way, but as it ſets ſometimes as we proved Eaſterly, ſo does it, as they ſay, ſet at other times Weſterly, whereby many Ships have been loſt; for then the Ships being before their Accounts, they fall in with the Land before they are aware. Thus one Year many Ships were loſt on Cape *Hattaraſſe*, and thereabouts.

Of the AIR.

THE Cape called *Cape Henry*, lies in 36½ of the Northern Latitude. The Air and Temperature of the Seaſons is much govern'd by Winds in *Virginia*, both as to Heat and Cold, Drineſs and Moiſture, whoſe Variations being very notable, I the more lamented the loſs of my Barometers and Thermometers, for conſiderable Obſervations might be made thereby, there being often great and ſuddain Changes. The Nore and Nore-Weſt are very nitrous and piercing, cold

cold and clear, or else stormy. The South-East and South hazy and soultry hot: Their Winter is a fine clear Air, and dry, which renders it very pleasant: Their Frosts are short, but sometimes very sharp, that it will freeze the Rivers over three Miles broad; nay, the Secretary of State assured me, it had frozen clever over *Potomack* River, over against his House, where it is near nine Miles over: I have observed it freezes there the hardest, when from a moist South East, on a sudden the Wind passing by the Nore, a nitrous sharp Nore-West blows; not with high Gusts, but with a cutting brisk Air; and those Vails then that seem to be shelter'd from the Wind, and lie warm, where the Air is most stagnant and moist, are frozen the hardest, and seized the soonest, and there the Fruits are more subject to blast than where the Air has a free Motion. Snow falls sometimes in pretty quantity, but rarely continues there above a Day or two: Their Spring is about a Month earlier than in *England*; in *April* they have frequent Rains, sometimes several short and suddain Gusts. *May* and *June* the Heat encreases, and it is much like our Summer, being mitigated with gentle Breezes that rise about 9 of the Clock, and decrease and incline as the Sun rises and falls. *July* and *August* those Breezes cease, and the Air becomes stagnant, that the Heat is violent and troublesome. In *September* the Weather usually breaks suddenly, and there falls generally very considerable Rains. When the Weather breaks many fall Sick, this being the time of an Endemical Sickness, for Sea-

Seasonings, Cachexes, Fluxes, Scorbutical Dropsies, Gripes, or the like, which I have attributed to this Reason. That by the extraordinary Heat the ferment of the Blood being raised too high, and the Tone of the Stomach relaxed, when the Weather breaks the Blood palls, and like over-fermented Liquors is depauperated, or turns eager and sharp, and there's a crude Digestion, whence the named Distempers may be supposed to ensue. And for confirmation, I have observed the Carminative Seeds, such as warm, and whose Oil sheaths the acid Humors that ever result from crude Digestions. But Decoctions that retain the Tone of the Stomach, as I suppose, by making the little Glands in the Tunicles of the Stomach, squeeze out their Juice, (for what is bitter may be as well offensive to the Stomach, as to the Palate) and then Chalibiates that raise the decayed Ferment, are no bad Practice; after which, I conceive, Armoniack Spirits might be very beneficial. But their Doctors are so Learned, that I never met with any of them that understood what Armoniack Spirits were: Two or three of them one time ran me clear down by consent, that they were Vomitive, and that they never used any thing for that purpose but Crocus Metallorum, which indeed every House keeps; and if their Finger, as the Saying is, ake but, they immediatly give three or four Spoonfuls thereof; if this fail, they give him a second Dose, then perhaps Purge them with 15 or 20 Grains of the Rosin of Jalap, afterwards Sweat them with *Venice* Treacle, Powder of Snake-Root, or *Gascoin*'s Powder; re-

and when theſe fail *conclamatum eſt.* But to return, 'Tis wonderful what influence the Air has over Mens Bodies, whereof I had my ſelf ſad aſſurances; for tho' I was in a very cloſe warm Room, where was a Fire conſtantly kept, yet there was not the leaſt Alteration or Change, whereof I was not ſenſible when I was ſick of the Gripes, of which Diſtemper I may give a farther account in its proper place. When a very Ingenious Gentlewoman was viſited with the ſame Diſtemper, I had the opportunity of making very conſiderable Obſervations. I ſtood at the Window, and could view the Clouds ariſe: For there ſmall black fleeting Clouds will ariſe, and be ſwiftly carry'd croſs the whole Element; and as theſe Clouds aroſe, and came nigher, her Torments were encreaſed, which were grievous as a labouring Womans; there was not the leaſt Cloud but lamentably affected her, and that at a conſiderable diſtance; but by her Shrieks it ſeemed more or leſs, according to the bigneſs and nearneſs of the Clouds. The Thunder there is attended often with fatal Circumſtances: I was with my Lord *Howard* of *Effingham* the Governour, when they brought Word that one Dr. *A.* was killed therewith, after this manner: He was Smoaking a Pipe of Tobacco, and looking out at his Window when he was ſtruck dead, and immediately became ſo ſtiff, that he did not fall, but ſtood leaning in the Window, with the Pipe in his Mouth, in the ſame poſture he was in when ſtruck: But this I only deliver as Report, tho' I heard the ſame Account from ſeveral, without any contradicting it.

Theſe

These things are remarkable, that it generally breaks in at the Gable end of the Houses, and often kills Persons in, or near the Chimneys range, darting most fiercely down the Funnel of the Chimney, more especially if there be a Fire, (I speak here confusedly of Thunder and Lightning) for when they do any Mischief, the Crash and Lightning are at the same Instant, which must be from the nearness of the Cloud. One time when the Thunder split the Mast of a Boat at *James* Town, I saw it break from the Cloud, which it divided in two, and seem'd as if it had shot them immediatly a Mile asunder, to the Eye: It is dangerous when it Thunders standing in a narrow Passage, where there's a thorough Passage, or in a Room betwixt two Windows; tho' several have been kill'd in the open Fields. 'Tis incredible to tell how it will strike large Oaks, shatter and shiver them, sometimes twisting round a Tree, sometimes as if it struck the Tree backwards and forwards. I had noted a fine spreading Oak in *James Town* Island, in the Morning I saw it fair and flourishing, in the Evening I observed all the Bark of the Body of the Tree, as if it had been artificially peel'd off; was orderly spread round the Tree, in a Ring, whose Semidiameter was four Yards, the Tree in the Center; all the Body of the Tree was shaken and split, but its Boughs had all their Bark on; few Leaves were fallen, and those on the Boughs as fresh as in the Morning, but gradually afterwards withered, as on a Tree that is fallen. I have seen several vast Oaks and other Timber

Trees twisted, as if it had been a small Willow that a Man had twisted with his Hand, which I could suppose had been done by nothing but the Thunder. I have been told by very serious Planters, that 30 or 40 Years since, when the Country was not so open, the Thunder was more fierce, and that sometimes after violent Thunder and Rain, the Roads would seem to have perfect casts of Brimstone; and 'tis frequent after much Thunder and Lightning for the Air to have a perfect Sulphurious Smell. Durst I offer my weak Reasons when I write to so great Masters thereof, I should here consider the nature of Thunder, and compare it with some Sulphurious Spirits which I have drawn from Coals, that I could no way condense, yet were inflamable; nay, would burn after they pass'd through Water, and that seemingly fiercer, if they were not over-power'd therewith. I have kept of this Spirit a considerable time in Bladders; and tho' it appeared as if they were only blown with Air, yet if I let it forth, and fired it with a Match or Candle, it would continue burning till all were spent. It might be worthy Consideration likewise, whether those frequent Thunders proceeded from the Air's being more stagnant, the motion of the Winds being impeded by the Trees, or whether the motion of the Winds being obstructed by them below, the motion might not be more violent aloft; and how far that may promote inflammability, for Stacks of Hay or Corn that ferment with moisture, never burn, unless when brisk Winds blow, that agitate and fan the

little

little fermenting Sparks, and often kindle them into an actual Fire. And Observance of the Meteors there might perhaps not be Impertinent, as both what are more rare, and what are more frequent, as of *Gossimore* in great abundance, and of those small Cob-webs in a Morning, which some have supposed to be Meteors. *Ignes fatui*, tho' there be many boggy Swamps and Marshes, are seldom, if any are seen there. There be frequent little sorts of Whirl-winds, whose Diameter may be sometimes not past two or three Yards, sometimes forty, which whisking round in a Circle, pass along the Earth, according to the motion of the Cloud, from whence they issue; and as they pass along with their gyrous or circular motion, they carry aloft the dry Leaves into the Air, which fall again often in places far remote. I have seen them descend in a calm Sun-shine Day, as if they had come from the Heavens in great Showers thereof, so that all the Elements seem'd filled therewith. And I could perceive them to descend from on high as far as I could possibly discern a Leaf. I remember a roguish Expression of a Seamen, otherwise silly enough, who wondering thereat, cry'd out, *Sure now 'tis manifest there is a World above!* and now with them 'tis the Fall of the Leaf. But to proceed, I thought this made it manifest, whence many preternatural Showers have happen'd. I remember at Sir *Richard Atherton*'s in *Lancashire*, some few Years ago, there fell a great number of the Seeds of Ivy-berries; at first we admir'd what they were, for they were cover'd with a thin

Skin that was red, and resembled the Figure of a small Wheat Corn; but afterwards they fully manifested what they were; for many sprouted and took Root. I suppose they were carry'd aloft by some such Whirl-wind, and let fall there. I have purposely gone into the place where I perceived this Gust, which is notorious enough by the Noise it makes, with ratling the Leaves as it carries them aloft, and have found a fine sharp Breeze of Wind.

Yours, &c.

Mr.

Mr. Clayton's *second Letter, containing his farther Observations on* Virginia.

BEing honour'd with the Thanks of the Society for my last, and receiving by my worthy Friend Dr. *Moulin* their Commands to proceed, I have added here my Observations of the Waters, and part of the Earth and Soil. I shall wave both Complements and Apologies, since I have greater Respect and Honour for the Society than I can possibly express, and have no reason to suspect their Favour, whose Candidness I so signally proved in my last.

Of the WATER.

'TWixt the two Capes, the Southern, call'd the *Cape Henry*, the more Northerly call'd *Cape Charles*, there runs up a great Bay, call'd the Bay of *Cheesepeak*; nine Leagues over in some places, in most Seven, lying much West, Nore and South, dividing *Virginia* into two unequal Parts. On the East side of this Bay there lies a narrow neck of Land, which makes the Counties of *Northamp-*

ton and *Accomack*. On the West side of the Bay there branches forth four great Rivers, *James River*, *York River*, *Rapahanack* and *Potomack*, that rise from a ridge of Mountains, whereof more in the Sequel. These Rivers plentifully water all the other parts of *Virginia*, emptying themselves into the great Bay. The Mouth of *James River*, which is the most Southerly of them, the Mouth of *Potomack*, which is the most Northerly, may be a hundred Miles distance: But as I have been credibly inform'd that the Falls of *James River* are not past thirty Miles from *Potomack*, which is a vast large River nine Miles over in many places. I have been told it was Navigable nigh two hundred Miles, much higher than any of the other Rivers: Whence I conclude in future times, it will be the most considerable for Trade when the Country comes to be inhabited further up into the main Land. The other Rivers are much about three Miles over a piece. And *James River* is Navigable at least eighty Miles. Within four or five Miles of *James Town*, *James River* and *York River* are not past four or five Miles asunder. Yea, Sloops of considerable Carriage may Sail up the Branches of the two Rivers, till they come within a Mile the one of the other; for I take it to be no more from Col. *Bollards* to Major *Troop*'s Landing, and I believe they may come much what as near again as Col. *Coles*, and several other places. *York* River is distant from *Rapahanack* in some places not past ten or twelve Miles, *Rapanack* from *Potomack* not

past

past seven Miles in one place, tho' it may be sixty in others. The Heads of the Branches of the Rivers interfere and lock one within another, which I think is best expressed after the manner that an *Indian* explained himself once to me, when I enquired how nigh the Rivers of *Carolina*, *Virginia* and *Maryland* arose out of the Mountains? from those that ran Westerly on the other side of the Mountains, he clapt the Fingers of one Hand 'twixt those of the other, crying, they meet thus; the Branches of different Rivers rising not past a hundred Paces distant one from another: So that no Country in the World can be more curiously watered. But this conveniency, that in future times may make her like the *Netherlands*, the richest place in all *America*, at the present I look on the greatest Impediment to the advance of the Country, as it is the greatest Obstacle to Trade and Commerce. For the great number of Rivers and the thinness of the Inhabitants distract and disperse a Trade. So that all Ships in general gather each their Loading up and down an hundred Miles distant; and the best of Trade that can be driven is only a sort of *Scotch* Pedling; for they must carry all sort of Truck that trade thither, having one Commodity to pass off another. This (*i. e.*) the number of Rivers, is one of the chief Reasons why they have no Towns; for every one being more sollicitous for a private Interest and Conveniency, than for a publick, they will either be for making forty Towns at once, that is, two

in every Country, or none at all, which is the Countries Ruin. But to return, The Tides in these Rivers regularly ebb and flow about two Foot perpendicular at *James Town*; there is there, as they call it, a Tide and half Tide, that is, it flows near two hours along by the Shoar, after that it is ebb in the Channel, and again it ebbs near two Hours by the Shoar, after that it is Flood in the Channel. This is great advantage to the Boats passing up and down the River. I suppose this is caused by many Creeks and Branches of the Rivers, which being considerable many, tho' only three or four Miles long, yet as broad as the *Thames* at *London*; others ten Miles long, some above twenty, that have little fresh Water which they carry of their own, but their Current primarily depending upon the Flux and Re-flux of the Sea. So that after the Tide is made in the Channel, it flows by the Shoar a considerable time afterwards, being that those Creeks are still to fill, and therefore as it were draws up a Source upwards by the Shoar; and likewise when the Tide returns in the Channel, the Creeks that could not so readily disburse their Water, being still to empty themselves, they make an ebbing by the Shoar a considerable time after that it is Flood, as I say, in the Channel. So far as the Salt Waters reach the Country is deemed less healthy. In the Freshes they more rarely are troubled with the Seasonings, and those Endemical Distempers about *September* and *October*. This being very remarkable,

I refer the Reaſon to the more piercing Genius of thoſe moſt judicious Members of the Society: And it might perhaps be worthy the Diſquiſition of the moſt Learned to give an Account of the various alterations and fatal effects that the Air has on humane Bodies, eſpecially when impregnated with a Marine Salt; more peculiarly when ſuch an Air becomes ſtagnant: This might perhaps make ſeveral beneficial Diſcoveries, not only in relation to thoſe Diſtempers in *America*, but perhaps take in your *Kentiſh* Agues, and many others remarkable enough in our own Nation. I lately was making ſome Obſervations of this nature, on a Lady of a delicate Conſtitution, who living in a clear Air, and removing towards the Sea-Coaſt, was lamentably afflicted therewith, which both my ſelf and others attributed to this Cauſe, ſhe having formerly upon her going to the ſame, been ſeized in the ſame manner. But to return: There is one thing more in reference to this very thing very remarkable in *Virginia*, generally twice in the Year, Spring and Fall, at certain Spring-Tides, the moſt of the Cattle will ſet on gadding, and run, tho' it be twenty or thirty Miles, to the River to drink the Salt Water, at which time there's ſcarce any ſtooping of them; which the People know ſo well, that if about thoſe times their Heards are ſtray'd from their Plantations, without more ſollicitation they go directly to the Rivers to fetch them home again. As for the Waters in the Springs in general, they are, I think, ſomewhat more

eager

eager than those in *England.* In that I have observed, they require some quantity more of Malt to make strong Beer than our *English* Waters, and will not bear Soap. I have try'd several by infusing of Galls, and found little difference in the Colours, turning much what the Colour of common Sack in Taverns. I tried two Wells at Col. *Birds*, by the Falls of *James River*, several Wells near *James Town*, some Springs in the *Isle of Wight County:* There's a Spring in the *Isle of Wight*, or *Nanzamond County*, vents the greatest Source of Water I ever saw, excepting *Holy-well in Wales*, but I had not opportunity to make Experiments thereof. I tried likewise some Springs on the Banks of *York River*, in *New Kent* and *Glocester County*, but found them vary very little as to Colour. I could not try any thing as to their specifick Gravity, having neither Aquapoise, nor those other Glasses I had contrived peculiarly for making such Experiments, they being all lost with my other things. I had Glasses blown would hold about five Ounces, others about ten Ounces, with Necks so small, that a Drop would make a considerable Variation; with these I could make much more critical and satisfactory Observations as to the specifical Gravity of Liquors, having critical Scales, than by any other way yet by me tried. I used this method to weigh Urines, which Practice I would recommend to the Inquisitive and critical Physicians. I had made many Observations hereof, but all Notes were

like-

likewise lost with my other things. Yet I have begun afresh; for there are more signal Variations in the Weights of Urines than one would at first imagin; and when the Eye can discover little, but judge two Urines to be alike, they may be found to differ very much as to Weight. By Weight I find Observations may be made of Affections in the Head, which rarely make any visible Alterations in the Urine. I have found two Urines not much unlike differ two and twenty Grains in the quantity of about four or five Ounces: But let them that make these Essays weigh all their Urines when cold, lest they be thereby deceiv'd. But to return to the Spring Waters in *Virginia*. There's a Spring at my Lady *Berkley*'s, called *Green-Spring*, whereof I have been often told, so very Cold, that 'tis dangerous drinking thereof in Summer-time, it having proved of fatal Consequence to several. I never tried any thing of what Nature it is of.

There be many petrefying Waters; and indeed I believe few of the Waters but participate of a petrifying Quality, tho' there be few Pebbles or paving Stones to be found in all the Country. But I have found many Sticks with crusty Congelations round them in the Ruins of Springs, and Stones figured like Honey-Combs, with many little Stars as it were shot in the Holes. And nothing is more common than petrefy'd Shells, unless you would

would determine that they are parts of natural Rock ſhot in thoſe Figures, which indeed I rather think; but thereof hereafter. Mr. Secretary *Spencer* has told me of ſome Waters participating much of *Alome* or *Vitriol* towards *Potomack*. Up beyond the Falls of *Rapahanack* I have heard of Poyſonous Waters. But theſe I only mention as a hint to further Enquiry of ſome others, for I can ſay nothing of them my ſelf.

A Continuation of Mr. John Clayton's *Account of* Virginia.

Of the Earth and Soil.

WHen you make the Capes of *Virginia*, you may observe it low Land, so that at some distance the Trees appear as if they grew in the Water; and as you approach nigher to emerge thence. For a hundred Miles up into the Country, there are few Stones to be found, only in some places, Rocks of Iron Oar appear, which made me expect to have found many Waters turn Purple with Galls, but never met with any. Providence has supplied the common use of Stones, by making the Roads very good: so that they ride their Horses without shooing them; which yet are more rarely beaten on their Feet, than ours are in *England*, the Country and Clime being dry, their Hoofs are much harder; For I observed, that take a Horse out of the wet Marshes, and Swamps, as they there call them, and ride him immediatly, and he'll quickly be tender-footed. In some places, for several Miles together, the Earth is so intermix'd with Oyster-shells, that there may seem as many Shells as Earth; and how deep they lie thus intermingled, I think, is not yet known: for at bro-

broken Banks they discover themselves to be continued many Yards perpendicular. In several places these Shells are much closer, and being petrefied, seem to make a Vein of a Rock. I have seen in several places, Veins of these Rocky Shells, three or four Yards thick, at the foot of a Hill, whose Precipice might be twenty Yards perpendicular, whose Delf, I suppose, shot under the Hill, pieces of these Rocks broken off, lie there, which, I suppose, may weigh twenty or thirty Tuns a piece, and are as difficult to be broken as our Free-stone. Of these Rocks of Oyster-shells that are not so much petrified, they burn and make all their Lime; whereof they have that store, that no Generation will consume. Whether these were formerly Oysters, which left by the subsiding Seas, (as some suppose, that all that Tract of Land, now high Ground, was once overflowed by the Sea) were since petrefied, or truly Stones, *sui Generis*, I leave to the Honourable Society to determin. But when I consider the constant and distinct shooting of several Salts, Nature's Curiosity, in every thing, so far exceeding that of Art, that the most Ingenious, when referr'd thereto, seem only endued with an Apish fondness, I cannot think any thing too difficult or wonderful for Nature; and indeed I do not apprehend, why it may not be as feasible to suppose them to have been Rocks, at first shot into those Figures, as to conceive the Sea to have amass'd such a vast number of Oyster-shells one upon another, and afterwards subsiding, should leave them cover'd with such Mountains of Earth,

Earth, under which they should petrefie: But not to launch forth too far into those Disputes, since I must modestly remember to whom I write. Often, in the looser Banks of Shells and Earth, are found perfect Teeth petrefied, some whereof I have seen, could not be less than two or three Inches long, and above an Inch broad: Tho' they were not Maxilary Teeth, the part that one might suppose grew out of the Jaw, was polish'd, and black, almost as Jett; the part which had been fasten'd in the Jaw and Gums, was brown, and not so shiningly polish'd, or smooth; if they were, as they seemed to be, really Teeth, I suppose, they must have been of Fishes. The back-Bone of a Whale, and as I remember, they told me of some of the Ribs, were digg'd out of the side of a Hill, several Yards deep in the Ground, about four Miles distant from *James Town*, and the River. Mr. *Banister*, a Gentleman pretty curious in those things, shew'd me likewise the Joynt of a Whale's back-Bone, and several Teeth, some whereof, he said, were found in Hills beyond the Falls of *James* River, at least, a hundred and fifty Miles up into the Country. The Soil in general is Sandy: I had designed, and I think it might be worth a critical Remark, to observe, the difference of Soils seem appropriated to the several sorts of Tobacco: For there is not only the two distinct sorts of a sweet-scented, and Aranoko Tobacco, but of each of these be several sorts much different, the Seeds whereof are known by distinct Names, they having given them the Names of those Gen-

Gentlemen most famed for such sort of Tobacco, as of *Prior*-seed, *&c.* Nay, the same sort of Seed in different Earths, will produce Tobacco much different, as to goodness. The richer the Ground, the better it is for Aranoko Tobacco, whose Scent is not much minded, their only aim being to have it specious, large, and to procure it a bright Kite's Foot colour. Had not my Microscopes, *&c.* Tools to grind Glasses, been cast away, with my other things, I had made some critical Enquiries into their several Natures, I would have examin'd what proportions of Salts, all the sorts of Earths had afforded, and how Water impregnated with their Salts, would have changed with infusing Galls, how with the Syrup of Violets, and how they would have percipitated Mercury, or the like, and so far forth as I had been able, examined them by the several Tryals of Fire. I conceive Tobacco to be a Plant abounding with Nitro-Sulphurious Particles; for the Planters try the goodness of their Seed, by casting a little thereof into the Fire; if it be good, it will sparkle after the manner of Gun-powder: so will the Stalks of Tobacco-leaves, and perhaps has something analagous to the Narcotick Sulphur of *Venus*, which the Chymists so industriously labour after. The World knows little of the efficacy of its Oyl, which has wonderful Effects in the curing of old inveterate Sores, and Scrophulous Swellings, and some, otherwise applied and qualified. The goodness of Tobacco I look on primarily consists in the volatility of its Nitre: And hence the

sandy

sandy Grounds that are most impregnated therewith, and whose Nitrous Salt is most Volatile, for such Grounds are quicklieſt spent, yield Tobacco's that have the richeſt Scent, and that shortly becomes a pleasant Smoak; whereas, in Tobacco that grows on stiff Ground, the Salts seem more fix'd, and lock'd up in the Oyl, so that whilst new, 'tis very heady and strong, and requires some time for its Salts to free themselves, and become Volatile; which it manifests, by its having an Urinous Smell. The same Reason satisfies, why Tobacco that grows on low Lands as far as the Salts, tho' the Plant be never overflowed with Salt Water, yet the Ground that feeds the Plant being impregnated with Salt Water, that Tobacco Smoaks not pleasantly, and will scarcely keep Fire, but do all that a Man can, will oft go out, and gives much trouble in frequent lighting the Pipe, 'till after it has been kept some considerable time: Which may be assign'd to the fixeder Saline Particles of the Marine Salt in these Plants, which require more time e'er they be render'd Volatile. Here it might be worthy an Enquiry into the Nature of Filtration of Plants, since we may hence gather, Particles of the Marine Salt are carried along with the *Succus Nutritius* of the Plant; concerning which, if it were not too much to deviate from the Matter in hand, I should offer some Reflections of my own, which the Learned Society might perhaps improve: For I think thence might be made many happy Conjectures as to the Virtues of Plants. So where we see Plants,

or Trees, of an open Pore growing low, we shall find their Juice has subtile Parts: So have all Vines, whether the Grape Vine, or Briony, or a Smilax, or the like. If a Gummous Plant or Tree, that grows low, and close Pored, it abounds with acid Spirits, as *Lignum Vitæ*, &c. if it grow tall, and be open Pored, it abounds with a subtile Volatile Spirit, as your Firrs, and the Turpentine Tree. But to insist no further herein, than as this may be applicable to the present Discourse: For I have observed, that that which is called Pine-wood Land, tho' it be a sandy Soil, even the Sweet-scented Tobacco that grows thereon, being large and porous, agreeable to Aranoko Tobacco; it smoaks as coursly as Aranoko: Wherefore 'tis, that I believe the Microscope might make notable Discoveries towards the knowledge of good Tobacco: For the closer the Composition of the Leaf, the better the Tobacco; and therefore the Planters and Merchants brag of the Substance of their Tobacco; which word, did they always take it in a true Sence, for the Solidness, and not mistake it for the Thickness, it would be more consonant to a true Observation: for as I said of the Pine-wood Tobacco, some of it is thick and not Solid, and differs from the best Tobacco, as Buff does from Tann'd Leather; so that if the Tobacco be sound and not Rotten, you may give a great guess at the goodness of Tobacco, when you weigh the Hogsheads, before you see them: For if an equal care be taken in the packing of them the best Tobacco will weigh the heaviest,

and

and Pack the closest. Now I said, that the Sweet-scented Tobacco most in vogue, which was most fam'd for its Scent, was that that grew on sandy Land; which is true, if you would Smoak it whilst new, or whilst only two or three Years Old; but if you keep the stiff Land Tobacco, which is generally a Tobacco of great Substance five or six Years, it will much excel: For tho' the sandy Land Tobacco abound with a Volatile Nitre at first, yet the stiff Land Tobacco abounds with a greater quantity of Nitre, only that it is lock'd up in its Oyl at first, and requires more time to extricate it self, and become Volatile; but the Pine-wood Land having little of the Nitro-Sulphurious Particles, neither is, nor ever will make any thing of a rich Smoak. Discoursing hereof some days since, to a Gentleman of good Observation, that has been versed with Maulting, he assured me, to back this my Supposition, or Hypothesis, he had observed, that Barly that grew on stiff Ground, requir'd more time considerably to Mellow, and come to perfection, than that that grew on light Land. Having proceeded thus far to speak of Tobacco, I shall add one or two things more. The Planters differ in their Judgments about the Time of Planting, or Pitching their Crops: Some are for Pitching their Crops very early, others late, without any distinction of the Nature of the Soils; and 'tis from the different Effects that they find, in that, sometimes early, sometimes the late Planting succeeds: But they have not the Reason to judge of the Cause, to consider the Accidents

of the Year, and the Difference of the Soils. In sandy Grounds they need not strive so much for early Planting, the Losenes of the Earth, and the kind natur'd Soil, yielding all that it can, easily and speedily, and Sand retaining the Heat, makes the Plants grow faster. But in stiff Soils, if the Crops be not early pitch'd, so that during the Season of Rains it have got considerable Roots, and shot them some depth, if early Droughts come, it so binds the Land, that the Roots never spread or shoot deeper, or further than the Hill that they are planted in: For they plant them as we do Cabbages, raising Hills to set every Plant in, about the bigness of a common Mole-hill: observing this on the Plantation where I lived, that it was stiff Ground, I advised them to Plant their Crops as early as possible; and in order thereunto, I tried several ways to further the Plants; but not to trouble you with the several Experiments that I made, in reference thereto: What I found most advantageous was, by taking an infusion of Horse-dung, and putting thereon Soot, and then my Seeds; this I kept Forty eight Hours in an ordinary digestive heat, I had two Beds left me to Sow, in the midst of those the People sow'd, and the quantity of Seed that they generally allotted to the same quantity of Ground; when I sow'd, I mix'd Ashes with the Seed, having decanted the Liquor, that the Seed might sow the evenner: The effect was, that my Plants came up much sooner, grew swifter, and I had five Plants for one more than any of the other Beds bore;

bore; I left the Country shortly after, and so no certainty of the final Result. There be had various Accidents and Distempers, whereunto Tobacco is liable, as the Worm, the Fly, Firing to Turn, as they call them, Frenchmen, and the like. I propos'd several ways to kill the Worm and Fly, as by Sulphur and the like; but had no opportunity to experiment it: I shall set down that I had most hopes of, which perhaps may give a hint to others to try or improve. Tobacco-seed is very small, and by consequence so is the young Plant at first, that if gleamy Weather happen at that time, it breeds a small Fly, which consumes the Plume of the Plant; now it being early in the Year when they Sow the Seed, *viz.* about the fourteenth of *January*, they cover the Ground, to secure, as well as they can, their tender Plants, from the nipping Frosts, that may happen in the Nights; they cover them only with a few Oak-leaves, or the like; for Straw they find apt to Harbour and Breed this Fly: I therefore would advise them to smoak Straw with Brimstone, once in two or three Nights, and so they might cover them securely, with that which would preserve them infinitely beyond the Covering with Oak-boughs; indeed, I would advise them to keep peculiarly so much of their *Indian* Corn-blades, which they gather for their Fodder, for this very purpose, being as I conceive, much the best, there being no Chaff to foul their Beds, and prejudice them when they should weed them. What they call Firing is this: When Plants are of small Substance, as when there has

been a very Wet and Cold Season, and very hot Weather suddainly ensues, the Leaves turn Brown, and dry to dust: the cause I conceive to be hence: The Plant being feeble, and having a small quantity of Oyl, which makes the more solid part of the Plant, the Earth being suddainly heated by the Sun's fiercer Beams, the Roots are rather scorch'd and dried up in the Earth, than nourish'd; so that the Plant consisting only of watry parts, is consumed, as it were, by Fire: sometimes hopeful Plants, when by a sudden Gust some Master Veins are broken, if suddain heat ensues, they likewise Fire: For being not come to maturity, and being deprived of the Supports of Life and Vegetation, they likewise perish, are dried up, and fall to dust. *French-men* they call those Plants, whose leaves do not spread and grow large, but rather spire upwards, and grow tall; these Plants they do not tend, being not worthy their Labour. Where they so Critical, I believe, they might have great Guess what Plants were most likely to turn *French-men*, by observing whether the Roots of the Plants run downwards, as those whose Branches are aptest to spire upwards: For tho' I have not made positive proof thereof, I have something more than bare fancy for my conjecture; I have pull'd up some of these *French-men*, and compar'd them with the Roots of some other Plants, and found them much longer than others; and 'tis observeable, loose Soils, and sandy Ground, are more subject thereto than the stiff Land. The Country of it self is one entire Wood, consisting

consisting of large Timber Trees of several sorts, free from Thickets or under Wood, the small Shrubs growing only on Lands, that have been clear'd, or in Swamps; and thus it is for several Hundreds of Miles, even as far as has yet been discover'd. But that shall be reserv'd 'till another opportunity.

I am, &c.

Mr. John Clayton, *Rector of* Crofton *at* Wakefield, *his Letter to the* Royal Society, *giving a farther Account of the Soil, and other Observables of* Virginia.

I Shall here present you with a continuation of my Remarks on the River, Soil, and Plants of *Virginia*. And first, as to the River on the other side the Mountains, said to Ebb and Flow. I have been assured by Col. *Bird*, who is one of the Intelligentest Gentlemen in all *Virginia*, and knows more of *Indian* Affairs than any Man in the Country, that it was a Mistake; for that it must run into a Lake, now called *Lake Petite*, which is fresh Water; for since that time a Colony of the *French* are come down from *Canada*, and have seated themselves on the back of *Virginia*, where *Fallam* and the rest suppos'd there might be a Bay, but is a Lake, to which they have given the Name of *Lake Petite*, there being several larger Lakes 'twixt that and *Canada*. The *French* possessing themselves of these Lakes, no doubt will in short time be absolute Masters of the Beaver Trade, the greatest number of Beavers being catch'd there

there. The Colonel told me likewiſe, that the common Notion of the Lake of *Canada*, he was aſſured was a Miſtake, for the River ſuppoſed to come out of it, had no Communication with any of the Lakes, nor the Lakes one with another, but were diſtinct. But not to ramble after hear-ſay, and other matters; but to return to the Parts of *Virginia* inhabited by the *Engliſh*, which in general is a very Fertile Soil, far ſurpaſſing *England*, for there *Engliſh* Wheat (as they call it, to diſtinguiſh it from *Maze*, commonly called *Virginia* Wheat) yields generally 'twixt Fifteen and Thirty fold, the Ground only once plow'd; whereas 'tis a good Crop in *England* that yields above Eight fold, after all their Toil and Labour. And yet in truth 'tis only the barrenneſt Parts that they have cultivated, Tilling and Planting only the High-Lands, leaving the Richer Vales unſtirr'd, becauſe they underſtand not any thing of Draining. So that the Richeſt Meadow-Lands, which is one third of the Country, is Boggy, Marſh, and Swamp, whereof they make little Advantage, but looſe in them abundance of their Cattle, eſpecially at the firſt of the Spring, when the Cattle are weak, and venture too far after young Graſs. Whereas vaſt Improvements might be made thereof; for the generality of *Virginia* is a Sandy Land with a ſhallow Soil. So that after they have cleared a freſh piece of Ground out of the Woods, it will not bear Tobacco paſt two or three Years, unleſs Cow-pen'd; for they Manure their Ground by keeping their

their Cattle, as in the South you do your Sheep, every Night confining them within Hurdles, which they remove when they have sufficiently dung'd one spot of Ground; but alas! they cannot Improve much thus, besides it produces a strong sort of Tobacco, in which the Smoakers say they can plainly taste the fulsomness of the Dung. Therefore every three or four Years they must be for clearing a new piece of Ground out of Woods, which requires much Labour and Toil, it being so thick grown all over with Massy Timber. Thus their Plantations run over vast Tracts of Ground, each ambitioning to engross as much as they can, that they may be sure to have enough to Plant, and for their Stocks and Herds of Cattel to Range and Feed in, that Plantations of 1000, 2000, or 3000 Acres are common, whereby the Country is thinly inhabited; their Living solitary and unsociable; Trading confused and dispersed; besides other Inconveniences: Whereas they might Improve 200 or 300 Acres to more Advantage, and would make the Country much more Healthy; for those that have 3000 Acres, have scarce cleared 600 Acres thereof, which is peculiarly term'd the Plantation, being surrounded with the 2400 Acres of Woods: so that there can be no free or even motion of the Air, but the Air is kept either stagnant, or the lofty Sulphurous Particles of the Air, that are higher than the tops of the Trees, which are above as high again as the generality of the Woods in *England*, descending when they pass over the cleared spots of Ground,

must

must needs in the violent heat of Summer, raise a preternatural Ferment, and produce bad Effects. Nor is it any advantage to their Stocks, or Crops; for did they but drain their Swamps, and Low-Lands, they have a very deep Soil, that would endure Planting twenty or thirty Years, and some would scarce ever be worn out, but be ever longer better, for they might lay them all Winter, or when they Pleased in Water, and the product of their Labour would be double or treble, whether Corn or Tobacco; and that this is no fond Projection, (though when I have discoursed the same to several, and in part shewn them how their particular Grounds might be drained at a very easie rate) they have either been so conceited of their old way, so sottish as not to apprehend, or so negligent as not to apply themselves thereto. But on the Plantation where I lived, I drained a good large Swamp, which fully answered expectation. The Gentlewoman where I lived, was a very Acute Ingenious Lady; who one day Discoursing the Overseer of her Servants, about pitching the ensuing Year's Crop. The Overseer was naming one place where he designed to Plant 30000 Plants, another place for 15000, another for 10000, and so forth the whole Crop, designed to be about 100000 Plants: Having observed the Year before he had done the like, and scattered his Crop up and down the Plantation, at Places a Mile, or a Mile and a half asunder, which was very Inconvenient, and whereby they lost much time. I interposed, and asked, why they did not

Plant

Plant all their Crop together? The Fellow ſmiled as it were at my Ignorance, and ſaid, there was very good Reaſon for it. I replied, that was it I enquir'd after. He returned, the Plantation had been an old planted Plantation, and being but a ſmall Plot of Ground, was almoſt worn out, ſo that they had not Ground altogether that would bring forth Tobacco. I told him then they had better Ground than ever yet they had planted, and more than their Hands could manage. He ſmil'd again, and asked me, where? I then named ſuch a Swamp. He then ſaid ſcornfully, he thought what a Planter I was; that I underſtood better how to make a Sermon, then managing Tobacco. I replied with ſome warmneſs, tho' I hoped ſo, that was Impertinence, and no Anſwer. He then ſaid, that the Tobacco there would drown, and the Roots rot. I replied, that the whole Country would drown if the Rivers were ſtopt, but it might be laid as dry as any Land on the Plantation. In ſhort, we diſcourſed it very warmly, till he told me, he underſtood his own Buſineſs well enough, and did not deſire to learn of me. But the Gentlewoman attended ſomewhat better to my Reaſoning, and got me one day to go and ſhew her how I projected the draining of the Swamp, and thought it ſo feaſible, that ſhe was reſolved to have it done; and therefore deſir'd me I would again Diſcourſe her Overſeer, which I did ſeveral times, but he would by no means hearken thereto, and was ſo poſitive, that ſhe was forc'd to turn him away, to have her Servants ſet about the

the Work; and with three Men in thirteen Days I drained the whole Swamp, it being Sandy Land, soaks and drains admirably well, and what I little expected, laid a Well dry at a considerable distance. The Gentlewoman was in *England* last Year, and I think Dr. *Moulin* was by when she asked me. Now to teach her how she might make her Tobacco that grew in the Swamp less, for it produced so very large, that it was suspected to be of the *Aranoko* kind: I told her, though the complaint was rare, yet there was an Excellent Remedy for that, in letting every Plant bear eight or nine Leaves instead of four or five, and she would have more Tobacco, and less Leaves. Now you must know they top their Tobacco, that is, take away the little top-bud, when the Plant has put forth as many Leaves as they think the Richness of the Ground will bring to a Substance; but generally when it has shot forth four or six Leaves. And when the top-bud is gone, it puts forth no more Leaves, but Side-branches, which they call Suckers, which they are careful ever to take away, that they may not empoverish the Leaves. I have been more tedious in the Particulars, the fullier to evince how resolute they are and conceitedly bent to follow their old Practice and Custom, rather than to receive Directions from others, tho' plain, easie, and advantageous. There are many other Places as easie to drain as this, tho' of larger extent, and richer Soil, for some of which I have given directions, and have only had the return perhaps of a flout afterwards

wards: Even in *James Town Island*, which is much what of an Oval Figure, there's a Swamp runs Diagonal-wise over the Island, whereby is lost at least 150 Acres of Land, which would be Meadow, which would turn to as good Account as if it were in *England:* Besides it is the great annoyance of the Town, and no doubt but makes it much more unhealthy. If therefore they but scour'd the Channel, and made a pretty ordinary Trench all along the middle of the Swamp, plac'd a Sluce at the Mouth, where it opens into the back Creek; for the Mouth of the Channel there is narrow, has a good hard bottom, and is not past two Yards deep when the Flood is out; as if Nature had designed it before hand: They might thus drain all the Swamp absolutely dry, or lay it under Water at their Pleasure. I have talked several times hereof to Mr. *Sherwood*, the owner of the Swamp, yet nothing is essayed in Order thereto. And now since we are speaking of *James Town* give me leave to adjoin some Reflections as to the Situation and Fortifications of the Place. The Natural Situation of the place is such, as perhaps the World has not a more commodious Place for a Town, where all things conspire for Advantage thereof.

James Town Island is rather a *Peninsula*, being joined to the Continent by a small Neck of Land, not past Twenty or Thirty Yards over, and which at Spring-Tides is overflow'd, and is then an absolute Island. Now they have built a silly sort of a Fort, that is, a Brick Wall in the shape of a Half-Moon, at the beginning of the Swamp, because the Chan-

Channel of the River lies very nigh the Shoar; but it is the same as if a Fort were built at *Chelsey* to secure *London* from being taken by Shipping. Besides Ships passing up the River are secured from the Guns of the Fort, till they come directly over-against the Fort, by reason the Fort stands in a Vale, and all the Guns directed down the River, that should play on the Ships, as they are coming up the River, will lodge their Shot within Ten, Twenty, or Forty Yards in the rising Bank, which is much above the Level of the Fort; so that if a Ship gave but a good Broad-side, just when she comes to bear upon the Fort, she might put the Fort into that confusion, as to have free Passage enough. There was indeed an old Fort of Earth in the Town, being a sort of *Tetragone*, with something like Bastions at the four Corners, as I remember; but the Channel lying further off to the middle of the River there, they let it be demolished, and built that new one spoke of, of Brick, which seems little better than a blind Wall, to shoot Wild Ducks or Geese.

If they would build a Fort for the Seeurity of the Town and Country, I conceive it should be on *Archer*'s *Hope Point*, for that would stop the Ships from passing up the River, before they came to the Town, and would secure the Town from being block'd up by Sea. The Channel at *Archer*'s *Hope Point* lies close by the Shoar, and makes such an Angle there by reason of *Hog Island*, that going up or down the River, let the Wind be where it will, they must there bring the contrary Tack

on

on Board, and generally when they About the Ship as they call it, they are ſo near the Shoar, that a Man may almoſt fling a Finger-ſtone on Board. How much this hinders the motion of a Ship, and what Confuſion it muſt be to them to bring a contrary Tack on Board, whilſt they have all the Guns of a Fort playing ſo nigh upon them, may readily be conceived. *Archer*'s *Hope* is a Neck of Land, that runs down three Miles long, not much paſt half a Mile broad betwixt the Main River and *Archer*'s *Hope Creek*, which has large Marſhes and Swamps; ſo that a Citadel built upon the Point, would almoſt be Impregnable, being it could be attack'd no way but one, which is ſo narrow a ſlender Neck of Land, that it would be difficult to take it that way: And it would ſecure *James Town* from being block'd, being it would not be paſt a Mile by Water, to the Point of *James Town Iſland*. The Iſland is ſo ſurrounded with Water and Marſhy Land, that the Town could never be Bomb'd by Land. But now to return to the Reflections of Improving, and Manuring of Land in *Virginia*; hitherto, as I have ſaid, they have uſed none but that of Cow-penning; yet I ſuppoſe they might find very good Marle in many places, I have ſeen both the red and blew Marle at ſome breaks of Hills: This would be the propereſt Manure for their Sandy Land, if they ſpread it not too thick, theirs being, as I have ſaid, a ſhallow, Sandy Soil, which was the Reaſon I never adviſed any to uſe Lime, tho' they have very good Lime of Oyſter-ſhels; but

that's

that's the propereſt Manure for cold Clay Land, and not for a Sandy Soil. But as moſt Lands have one Swamp or another bordering on them, they may certainly get admirable Slitch, wherewith to Manure all their uplands. But this, ſay they, will not improve Ground, but clods and grows hard; 'tis true, it will do ſo for ſome time, a Year or two at the firſt; but did they caſt it in heaps, and let it lie for two or three Years after a Froſt or two had ſeized it, and it had been well pierced therewith, I doubt not it would turn to good Account: And for this too I have ſomething more than bare conjecture; for Diſcourſing it once with a good notable Planter, we went to view a heap thereof, that caſually he had caſt up 'twixt three and four Years before, and we found it not very binding, but rather a fine Natural Mold, whereupon he did confeſs, he then remembred that out of a ridge of the like Mold he had very large Plants, which muſt have been of the like Slime or Slitch caſt up before: But ſaid, that himſelf and others deſpaired of this Manure, becauſe they had taken of this Slitch freſh and moiſt out of the Swamp, and fill'd Tobacco Hills with it, and in the midſt of it planted their Plants, which ſo bound the Roots of their Plants, that they never came to any thing. But he ſaid, he then ſaw his Error, yet I have not heard he has remembred to Correct it. But 'tis ſtrange in how many things beſides they are remiſs, which one would think *Engliſh* Men ſhould not be guilty of. They neither Houſe nor Milk any of their Cows in Win-

ter, having a Notion that it would kill them; yet I perswaded the afore-mentioned Lady where I lived, to Milk four Cows the last Winter that I staid in the Country, whereof she found so good Effect, that she assured me she would keep to my Advice for the future; and also as I had further urged, House them too, for which they have mighty Conveniencies, their Tobacco Houses being empty ever at that time of the Year, and may easily be fitted in two or three days time without any Prejudice; whereby their Cattle would be much sheltered from those Pinching sharp Frosts that some Nights on a sudden become very severe. I had another Project for the Preservation of their Cattle proved very successful; I urged the Lady to sow her Wheat as early as possibly she could, so that before Winter it might be well rooted, to be early and flourishing at the first of the Spring: So that she might turn thereon her weak Cattle, and such as should at any time be swamp'd, whereby they might be recruited and saved, and it would do the Wheat good also. I advised her likewise to save, and carefully gather her *Indian* Corntops, and blades, and all her Straw, whatever could be made Fodder, for her Cattle; for they get no Hay, tho' I was urging her to that too, and to sow *Saintfoin*; for being a Sandy Soil, I am confident it would turn to very good Account. They have little or no Grass in Winter, so that their Cattle are pined and starved, and many that are brought low and weak, when the Spring begins, venture too far into the Swamps

after

after the fresh Grass, where they perish; so that several Persons lose ten, twenty or thirty Head of Cattle in a Year: I observed this was much owing to their Inadvertency and Error in their way of Managing and Feeding them; for they get little Fodder, but as they think Corn being more Nourishing, feed them with their *Indian* Corn, which they give them Morning and Evening; they spend thus a great quantity of Corn, and when all's done, what signifies two or three Heads of Corn to a Beast in a Morning? It makes them only linger about the Houses for more? and after that sweet Food they are not so prompt to brouze on the Trees, and the course Grass which the Country affords. So that thus their Guts shrink up, and they become Belly-shot as they call it. I advised therefore never to give them any thing in a Morning, whereby as soon as they were set forth of the Cow-pens, they would fall a feeding, and tho' they filled their Bellies only with such course stuff as had little Nourishment in it, yet it would keep out their Bellies, and they would have a better Digestion; and then when they were come home at Nights, to Fodder them, beginning with Straw and their courseſt Fodder, which they would learn to eat by degrees, before they tasted that that was more delicate, and whilst their digestion was strong, would yield them Nourishment to keep them still so; afterwards when the Winter pinched, their fine Fodder then would stand them in stead; and hereby they might preserve their weakest Cattle. By these Methods, and the help of

the Wheat-patch, she, the Gentlewoman where I lived, saved all her Cattle, and lost not one in Two Winters after, that I staid there; besides she saved above Twenty Barrels of Corn, as I remember that she told me she used to spend upon her Stock; and a Barrel of Corn is commonly worth Ten Shillings. Nay further, The last Spring she fed Two Beasts, a Bullock and a Cow, Fat, upon her Wheat, with the addition only of a little boil'd Corn, and yet the Wheat was scarce eat down enough. But to return again to the Nature of the Earth, which may be pretty well gather'd from what I have already said. I have observed, that at Five or Six yards deep, at the breaks of some banks, I have found veins of Clay, admirable good to make Pots, Pipes, or the like of, and whereof I suppose the *Indians* make their Pipes, and Pots, to boil their Meat in, which they make very handsomly, and will endure the Fire better than most Crucibles: I took of this Clay, dryed, powder'd, and sifted it; powdered and sifted Potsherds, and Glass; Three parts, Two parts and One part as I remember, and therewith made a large Crucible, which was the best I yet ever tried in my Life; I took it once red hot out of the Fire, and clapt it immediately into Water, and it started not at all. The Country abounds mightily with Iron Oar, that as I have been assured by some upon tryal, has been found very good. There are Rocks thereof appear at the precipice of Hills, at the foot whereof there runs a River fit for a Forge, and there's Wood enough to supply

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it with Charcoal; as I have heard there was formerly some Persons undertook the Work, and when they had made but a small quantity of Iron, which proved very good, the *Indian* Massacre happened, and they being higher seated than the then Inhabited part of the Country, were all cut off, and the Works demolished; so that it has frighted others I think from the like attempt; besides, such a work requires a greater Fund, and Bank of Mony to carry it on, than any there are able to lay out; and for Persons in *England* to meddle therewith, is certainly to be cheated at such a distance; some *Indians* brought Col. *Bird* some Black Lead, whereof he told me there was great store. There's very curious Chalk towards the falls of *Rapahanock* River, which they burn and make a delicate white Wash of it. The Secretary of State Col. *Spencer*, has assured me, there were Vitriolick or Alluminous Earth on the Banks of *Potomack*. And thus far of what my Memory supplies me, referring to the Earth; in the next place I shall give a short account of the Birds.

Of the BIRDS

I Had indeed begun once whilst I was in that Country to have made a Collection of the Birds, but falling sick of the Griping of the Guts, some of them for want of care corrupted, which made them fling others away that I had thoroughly cured; for I was

past taking care of them my self, there remaining but small hopes of my Life.

There are Three sorts of Eagles, the largest I take to be that they call the Grey Eagle, being much of the colour of our Kite or Glead.

The Second is the Bald Eagle, for the Body and part of the Neck being of a dark brown, the upper part of the Neck and Head is covered with a white sort of Down, whereby it looks very bald, whence it is so named.

The Third is the Black Eagle, resembling most the *English* Eagle; they build their Nests much after the manner that Dr. *Willoughby* describes, and generally at the top of some tall old Tree, naked of Bows and nigh the River side, and the People fall the Tree generally when they take the young; they are most frequently sitting on some tall Tree by the River side, whence they may have a prospect up and down the River, as I suppose to observe the Fishing Hauks; for when they see the Fishing Hauk has struck a Fish, immediately they take Wing, and 'tis sometimes very pleasant to behold the Flight, for when the Fishing Hauk perceives her self pursued, she will scream and make a terrible noise, till at length she lets fall the Fish to make her own escape, which the Eagle frequently catches before it reach the Earth or Water. These Eagles kill young Lambs, Pigs, *&c.*

Ths Fishing Hauk is an absolute Species of a Kings-fisher, but full as large, or larger than our Jay, much of the Colour and Shape

Shape of a Kings-fisher, tho' not altogether so curiously Feather'd; it has a large Crop, as I remember, there is a little Kings-fisher much the same in every respect with ours.

If I much mistake not, I have seen both Gos's, Hauk, and Falcon; besides there are several sorts of the lesser Kind of Stannels.

There is likewise the Kite and the Ring-tale.

I nevey heard the Cuckow there to my remembrance.

There's both a brown Owl and white Owl, much what as large as a Goose, which often kills their Hens and Poultry in the Night; the white Owl is a very delicate Feather'd Bird, all the Feathers upon her Breast and Back being Snow-white, and tipp'd with a Punctal of Jet-black: besides there is a Barn Owl much like ours; and a little sort of Scritch Owl.

There's both the Raven, and the Carrion-Crow; I do not remember I ever saw any Rooks there. Dr. *Moulin* and my self, when we made our Anatomies together, when I was at *London*, we shew'd to the *Royal Society*, that all Flat-bill'd Birds that groped for their Meat, had three Pair of Nerves, that came down into their Bills; whereby as we conceived they had that accuracy to distinguish what was proper for Food, and what to be rejected by their Taste when they did not see it; and as this was most evident in a Duck's Bill and Head, I draw'd a Cut thereof, and left it in your Custody: A Duck has larger Nerves that come into their Bills than Geese or any other Bird that I have

seen and therefore quafer and grope out their Meat the most: But I had then discover'd none of these Nerves in Round-bill'd Birds: But since in my Anatomies in the Country, in a Rook I first observed two Nerves came down betwixt the Eyes into the upper Bill, but considerably smaller than any of the three Pair of Nerves in the Bills of Ducks, but larger than the Nerves in any other Round-bill'd Birds; and 'tis remarkable these Birds more than any other Round-bill'd Birds seem to grope for their Meat in Cow-dung and the like: Since I have found in several Round-bill'd Birds the like Nerves coming down betwixt the Eyes, but so very small that had I not seen them first in a Rook I should scarce have made the discovery; in the lower Bill there are Nerves have much the same situation with the Flat-bill'd Birds, but very small, and scarce discernable, unless to the Cautious and Curious.

The Night Raven, which some call the *Virginia* Bat, is about the bigness of a Cuckow, feather'd like them but very short, and short Leg'd, not discernable when it flies, which is only in the Evening scuding like our Night Raven.

There's a great sort of ravenous Bird that feeds upon Carrion, as big very nigh as an Eagle, which they call a Turky Bustard, its Feathers are of a Duskish black, it has red Gills, resembling those of a Turky, whence it has its Name; it is nothing of the same sort of Bird with our *English* Turky Bustard, but is rather a Species of the Kites, for it will hover on the Wing something like them,

them, and is carnivorous; the Fat thereof dissolved into an Oil, is recommended mightily against old Aches and Sciatica Pains.

I think there are no Jackdaws, nor any Magpys; they there prize a Magpye as much as we do their Red Bird.

The *Pica Glandaria*, or Jay, is much less than our *English* Jay, and of another colour, for it is all blue where ours is brown, the Wings marbled as curiously as ours are, it has both the same Cry, and sudden jetting Motion.

There are great Variety and Curiosity in the Wood-peckers, there's one as big as our Magpye, with blackish brown Feathers, and a large Scarlet Tuft on the top of the Head: There are four or five sorts of Wood-peckers more, variegated with Green, Yellow and Red Heads, others spotted black and and white, most lovely to behold. There's a Tradition amongst them, that the Tongue of one of these Wood-peckers dryed will make the Teeth drop out if pick'd therewith, and cure the Tooth-ach (tho' I believe lit-of it, but look on it ridiculous) yet I thought fit to hint as much that others may try; for sometimes such old Stories refer to some peculiar Vertues, tho' not to all that is said of them.

There be wild Turkies extream large; they talk of Turkies that have been kill'd, that have weigh'd betwixt 50 and 60 Pound weight; the largest that ever I saw, weigh'd something better than 38 Pound; they have very long Legs, and will run prodigiously fast. I remember not that ever I saw any of them on the Wing,

Wing, except it were once: Their Feathers are of a blackish shining Colour, that in the Sun shine like a Dove's Neck, very specious.

Hens and Cocks are for the most part without Tails and Rumps; and as some have assured me our *English* Hens after some time being kept there have their Rumps Rot off; which I'm the apter to believe, being all their Hens are certainly of *English* breed. I'm sorry I made no Anatomical Observations thereof, and Remarks about the Use of the Rumps in Birds, which at present I take to be a couple of Glands, containing a sort of Juice for the Varnishing the Feathers; having observed all Birds have much recourse with their Bills to the Rumps when they dress their Plumes, whereby they scud thro' the Air more nimbly in their Flight.

Patridges there are much smaller than ours, and resort in Covies as ours do; their Flesh is very white, and much excels ours in my mind, *Sed de gustibus non est disputandum.*

Their Turtle-Doves are of a duskish blue colour, much less than our common Pidgeon, the whole Train is longer much than the Tails of our Pidgeons, the middle Feather being the longest. There's the strangest Story of a vast number of these Pidgeons that came in a Flock a few Years before I came thither; they say they came thro' *New England*, *New York* and *Virginia*, and were so prodigious in number as to darken the Sky for several Hours in the place over which they flew, and brake massie Bows where they light; and many like things which I have had as-

serted

ferted to me by many Eye-witnesses of Credit, that to me it was without doubt, the Relaters being very sober Persons, and all agreeing in a Story: nothing of the like ever happen'd since, nor did I ever see past Ten in a Flock together that I remember. I am not fond of such Stories, and had suppressed the relating of it, but that I have heard the same from very many.

The Thrush and Feldefire are much like ours, and are only seen in Winter there, accordingly as they are here.

Their Mocking Birds may be compared to our Singing Thrushes, being much of the same bigness; there are two sorts, the Gray and the Red, the gray has Feathers much of the colour of our gray Plovers with white in the Wings like a Magpye; this has the much softer Note, and will imitate, in its singing, the Notes of all Birds that it hears, and is accounted much the finest Singing Bird in the World. Dr. *Moulin* and I made in our Anatomy many Observations of Singing Birds to this effect: The Ears of Birds differ much from those of Men or Beasts, there's almost a direct passage from one Ear to the other of Birds, so that prick but the small Membrane call'd the Drum on either Ear, and Water poured in at one Ear will run out at the other: But this is not all, but what is much more remarkable, they have no Cochlea, but instead thereof there's a small Cocleous or twisting Passage that opens into a large Cavity, that runs betwixt two Sculls, and passes all round the Head, the upper Scull is supported by many hundreds of small

Thred-

Thred-like Pillars or Fibers, which as we supposed had another use also, to break the Sound from making any confused Eccho, and to make it one and distinct; this passage we observed betwixt the two Skulls was much larger in Singing Birds than in others that do not sing, so very remarkable that any Person that has been but shown this may easily judge by the Head what Bird is a Singing Bird, or has aptitude thereto, tho' he never saw the Bird before, nor knew what Bird it were: This has often made me reflect how much the Modification of Voices depends upon the acuracy of the Ear, and how deaf Persons become Dumb: And since I have observed that many Children that have an acute Wit enough that are slow of Speech, that is long before they speak are much longer before they can pronounce those Letters that are sharps, as *g. h. r.* and never have an aptitude to learn to sing. Hence I judge that Songs that have many Sharps in them are the difficultest to sing well, and discover any Persons skill upon the trial of Musick most. This I suppose only, having no Skill in Musick my self, nor having ever discoursed any Person about it. As I remember we show'd some of these things to the *Royal Society*, and I drew some Cuts thereof, and gave the Doctor upon promise that he would put these and many other our joint Observations in Print, but I hear he is since dead. I have Anatomized most sorts of Creatures, and never found any Four-footed Creature with an Ear like a Bird, unless a Mole; and a Mole has an Ear much like them, with a very thin double Scull, and great Cavity like a Bird, and

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is very accute of hearing, the Scull by reason of the large Cavity is very slender and easily crush'd, so that a Mole is quickly kill'd with a bruise on the Scull like a Lark, and upon the bruise the Membranes of the Scull turn black; whence *Segerus* mistake *Membranæ Cerebri in superficie exteriori omnino nigræ visæ.* But when I have taken care not to bruise the Skull the Membranes were not black at all, both *Segerus* and *Severinus* I think had some perceptions of the different Structure of a Mole's Ear, but not any thing of its Analogy to a Bird's Ear; they speak of a Bone *Egregie pumicosum:* And *Segerus* says there's a *Ductus ad ossis usque petrosi cavitatem protensus, plurimis fibrillis Membraneis annectabatur.* But to return, this Mocking Bird having its Name from *Mimicking*, all other Birds in singing is a wonderful mettled Bird, bold and brisk, and yet seems to be of a very tender Constitution, neither singing in Winter, nor in the midst of Summer, and with much difficulty are any of them brought to live in *England.*

The Red Mocking is of a duskish red, or rather brown; it sings very well, but has not so soft a Note as the gray Mocking Bird.

Of *Virginia* Nightingale, or red Bird, there are two sorts, the Cocks of both sorts are of a pure Scarlet, the Hens of a Duskish red; I distinguish them into two sorts, for the one has a tufted Cops on the Head, the other is smooth-feather'd. I never saw a tufted Cock with a smooth-headed Hen, or on the contrary; they generally resorting a Cock and Hen together, and play in a Thick-

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et of Thorns or Bryars in the Winter, nigh to which the Boys ſet their Traps, and ſo catch them and ſell them to the Merchants for about Six Pence apiece; by whom they are brought for *England*; they are ſomething leſs than a Thruſh.

There's a Bird very injurious to Corn, they call a Blackbird; I look on it a ſort of Starling, for they cry ſomething like them but do not ſing, are much what of the ſame bigneſs, have Fleſh blackiſh like theirs; they reſort in great Flocks together, they are as black as a Crow all over their Bills and all, only ſome of them have ſcarlet Feathers in the Pinions of their Wings. *Quæry*, Whether a diſtinct Species?

They have a Lark nothing differing from our common Lark; they have another Bird which they call a Lark that is much larger, as big as a Starling, it has a ſoft Note, feeds on the Ground; and as I remember has the Specifical Character of a long Heel, it is more inclined to yellow, and has a large half Moon on its Breaſt of yellow; if it have not a long Heel, *Quære*, Whether a Species of the Yellow-hammer?

They have a Martin very like, only larger than ours, that builds after the ſame manner. The honourable Col. *Bacon* has remarked for ſeveral Years, that they conſtantly come thither upon the Tenth of *March* one or two of them appearing before, being ſeen hovering in the Air for a Day or two then go away, and as he ſuppoſed return'd with the great Flock. The Colonel delighted much in this Bird, and made like Pidgeon-holes

at

at the end of his House with Boards purposely for them.

Their Swallow differs but little from ours.

They have a Bird they call a Blue-bird, of a curious azure colour about the bigness of a Chafinch.

There be other sorts of Goldfinches variegated with Orange and Yellow Feathers, very specious and beautiful.

Sparrows not much different from the *English*, but build not in the Eaves of Houses that ever I saw.

The Snow-bird which I take to be much the same with our Hedge-Sparrow; this is so called because it seldom appears about Houses but against Snow or very cold Weather.

The Humming Bird that feeds upon the Hony of Flowers: I have been told by some Persons, that they have kept of these Humming Birds alive, and fed them with Water and Sugar: they are much the smallest of all Birds, have long Bills and curious coloured Feathers, but differ much in colour.

Hearons three or four several sorts, one larger than the *English*, feather'd much like a *Spanish* Goose.

Another sort that only comes in Summer Milk white, with red Legs very lovely to behold.

The Bittern is there less than in *England*, and does not make that sounding Noise that ever I heard.

Curlews something less than our *English*, tho' bigger than a Wimbrel.

The Sandpiper much resembling the *English*.

The Snipe, two sorts, one resembling ours, the other much less.

The

The Tewits are smaller than the *English*, and have no long Toppins, but just like a young one that begins to fly.

There are a great number of wild Swans.

Wild-geese and Brent-geese all Winter in mighty Flocks, Wild-ducks innumerable, Teal, Wigeon, Sheldrakes, Virginia-didapers, the Black-diver, *&c.*

In my return home for *England*, *May* 1686. off of the Banks of *Newfound-land*, when we were, according to account, a hundred Leagues from the Shoar, we saw several prodigious floating Islands of the Ice, no less to our Wonder than Terror, for they were very dangerous: I got the Master to sail one day as nigh one of them as we securely durst, which we judged to be full a League in length, and was higher above Water than the top of our Main-mast; the Snow drove to and fro upon it as upon a large Plane. There was a great Flock of small Black-divers, that were not much bigger than a Feldifire, came to us a little before, but all of them then left and betook themselves to this Island of Ice. They dived the constantly'st, and the longest at a time of any Bird that I ever saw. We saw, as I remember, nigh Thirty of these Islands of Ice. Captain *Rider* being some fews days later in his Passage, and bearing more to the *Nore*, told me, he saw many more of these Islands of Ice, and some much larger.

There are in *Virginia* a great many Cormorants; several sorts of Gulls, and in about the Bay many Bannets. Thus much for the Birds.

Yours, &c.

A Con-

A Continuation of Mr. Clayton's *Account of* Virginia.

Of the Beasts of Virginia.

THERE were neither Horses, Bulls Cows, Sheep, or Swine, in all the Country, before the coming of the *English*, as I have heard, and have much reason to believe. But now among the *English* Inhabitants there are good store of Horses, though they are very negligent and careless about the Breed: It is true, there is a Law, that no Horse shall be kept stoned under a certain size, but it is not put in execution. Such as they are, there are good store, and as cheap or cheaper than in *England*, worth about Five Pounds apiece. They never Shoe them, nor Stable them in general; some few Gentlemen may be something more Curious, but it is very rare; yet they Ride pretty sharply, a Planter's Pace is a Proverb, which is a good sharp Hand-Gallop. The *Indians* have not yet learned to Ride, only the King of *Pomonkie* had got three or four Horses for his own Saddle, and an Attendant, which I think should in no wise be indulged, for I look on the allowing them Horses much more dangerous than even Guns and Powder.

Wild Bulls and *Cows* there are now in the uninhabited Parts, but such only as have

been bred from some that have strayed, and become Wild, and have propagated their kind, and are difficult to be shot, having a great Acuteness of Smelling. The common rate of a Cow and Calf is 50 *s.* sight unseen, be she big or little, they are never very curious to examine that Point.

Their *Sheep* are of a midling size, pretty fine fleeced in general, and most Persons of Estate begin to keep Flocks, which hitherto has not been much regarded, because of the Wolves that destroy them; so that a piece of Mutton is a finer Treat, than either Venison, Wild-Goose, Duck, Widgeon, or Teal.

Elke, I have heard of them beyond the Inhabitants, and that there was one presented to Sir *William Berkley*, which he sometime kept.

Deer, there are abundance of brave Red Deer, so that a good Woodsman, as they call them, will keep a House with Venison; the *Indians*, they say, make Artificial sorts of Heads of Boughs of Trees, which they Consecrate to their Gods, and these they put on to deceive the Deer when they go a Shooting, or Hunting, as they call it, and by mimiking the Feeding of the Deer, they by degrees get within Shot.

Swine, they have now in great abundance, Shoats or Porkrels are their general Food; and I believe as good as any *Westphalia*, certainly far exceeding our *English*.

Rackoone, I take it to be a Species of a Monky, something less than a Fox gray-hair'd, its Feet formed like a Hand, and the Face too has likewise the resemblance of a Monkies,

kies, besides being kept tame they are very Apish: They are very prejudicial to their Poultrey, as I remember.

An *Opossum*, as big, and something shaped like our Badgers, but of a lighter Dun colour, with a long Tail something like a Rat, but as thick as a Man's Thumb; the Skin of its Belly is very large, and folded so as to meet like a Purse, wherein they secure their Young whilst little and tender, which will as naturally run thither, as Chickens to a Hen; in these False Bellies they will carry their Young; these also feed on, and devour Corn.

Hares, many will have them to be a Hedg-Rabbet, but I know not what they mean thereby. I take them to be a perfect Species of Hares, because I have seen Leverets there with the white spot in the Head which the Old ones have not, so it is in *England*; and the Down is perfectly of the colour of our Hares, they sit as our Hares do, and make no Holes and Burrows in the Earth; true, they are but about the bigness of an *English* Rabbet, and run no faster; they generally take into some hollow Tree within a little space, which then the People catch by gathering the withered Leaves, and setting them on fire within the hollow of the Tree, and smoaking of them so till they fall down. Sometimes they take long Bryars, and twist them in the Down and Skin, and so pull them forth.

Squirrels, there are three sorts. The first is the great Fox Squirrel, much larger than the *English*, and gray, almost as a common Rabbet. These are very common, I have

eaten of them at the beſt Gentlemens Tables, and they are as good as a Rabbet. The Second is the Flying Squirrel, of a lighter Dun colour, and much leſs than the *Engliſh* Squirrel; the Skin on either ſide the Belly extended is very large betwixt the fore-leg and hind-leg, which helps them much in their skipping from one Bough to another, that they will leap farther than the Fox-Squirrel, though much leſs, yet this is ſtill rather skipping than flying, though the diſtinction be well enough. The Third is the Ground-Squirrel, I never ſaw any of this ſort, only I have been told of them, and have had them thus deſcribed to me, to be little bigger than a Mouſe, finely ſpotted like a young Fawn; by what I further apprehended, they are an abſolute ſort of Dor-Mouſe, only different in colour.

Musk-Rats, in all things ſhaped like our Water-Rats, only ſomething larger, and is an abſolute Species of Water-Rats, only having a curious Musky ſcent: I kept one for a certain time in a wooden Cheſt; two days before it died it was extraordinary Odoriferous, and ſcented the Room very much; but the day that it died, and a day after the ſcent was very ſmall, yet afterwards the Skin was very fragrant; the Stones alſo ſmelt very well. They build Houſes as Beavers do, in the Marſhes and Swamps (as they there call them) by the Water-ſides, with two or three ways into them, and they are finely daubed within. I pulled one in pieces purpoſely to ſee the contrivance: There were three different Lodging-Rooms, very neat, one higher

er than another, as I conceive purposely made for Retirement, when the Water rises higher than ordinary; they are considerably large, having much Trash and Lumber to make their Houses withal; I suppose they live mostly on Fish.

Batts, as I remember at least two sorts; one a large sort with long Ears, and particularly long stragling Hairs. The other much like the *English*, something larger I think, very common.

I never heard of any *Lions*; they told me of a Creature killed whilst I was there, in *Glocester* County, which I conceived to be a sort of Pard, or Tyger.

Bears there are, and yet bnt few in the Inhabited part of *Virginia*; towards *Carolina* there are many more. There was a small Bear killed within three Miles of *James City* the Year that I left the Country, but it was supposed to have strayed, and swam over *James River*. They are not very fierce, their Flesh is commended for a very rich sort of Pork; but the lying side of the Bear, as I remember, is but half the value of the other, weight for weight.

There are several sorts of *Wild-Cats* and *Poll-Cats*.

Beavers build their Houses in like manner as the Musk-Rats do, only much larger, and with pieces of Timber make Dams over Rivers; as I suppose either to preserve their Furs dry in their passage over the Rivers, otherwise to catch Fish by standing to watch them thereon, and jumping upon them on a sudden; they are very subtil Creatures, and

if half the Stories be true that I have been told, they have a very orderly Government among them; in their Works each knows his proper Work and Station, and the Overseers beat those Young Ones that loiter in their Business, and will make them cry, and work stoutly.

Wolves there are great store; you may hear a Company Hunting in an Evening, and yelping like a pack of Beagles; but they are very cowardly, and dare scarce venture on any thing that faces them; yet if Hungry, will pull down a good large Sheep that flies from them. I never heard that any of them adventured to set on Man or Child.

Foxes, they are very much like ours, only their Fur is much more grisled, or gray; neither do I remember ever to have seen any Fox-holes, but of this I am not positive.

Every House keeps three or four Mungrel *Dogs* to destroy Vermin, such as *Wolves*, *Foxes*, *Rackoons*, *Opossums*, &c. But they never Hunt with Hounds, I suppose, because there are so many Branches of Rivers, that they cannot follow them. Neither do they keep Grey-Hounds, because they say, that they are subject to break their Necks by running against Trees, and any Cur will serve to run their Hares into a hollow Tree, where after the aforesaid manner they catch them.

They have great store both of Land and Water *Tortoises*, but they are very small, I think I never saw any in that Country to exceed a Foot in length; there is also another sort of Land-Tortoise, different from the common sort, with a higher ridged Back, and speckled with red sort of Spots. *Frogs*

Frogs they have of several sorts, one of a prodigious largeness, eight or ten times as big as any in *England*, and it makes a strange noise, something like the Bellowing of a Bull, or betwixt that and the hollow sounding noise that the English Bittern makes.

Another very common sort, which they call *Toads*, because black, but I think differs nothing from our black Frog. They have Toads also like ours in *England*; and another small sort of Frog, which makes a noise like Pack-horse Bells all the Spring long. Another little green Frog, that will leap prodigiously, which they therefore call the Flying Frog. There is frequently heard in the Woods a shrill sort of noise, much like that which our Shrew-Mouse makes, but much sharper; I could never learn the certainty what it was that made this noise, it is generally in a Tree, and some have asserted to me, that it was made by the green Frog, yet I scarcely believe it. Mr. *Banister* assured me it was made by a sort of *Scarabeus* Beetle, that is I think full as big as the Humming-Bird; but neither do I believe that, and for this Reason, for I never saw that Beetle so low as the Salts, but always as high up in the Country as the Freshes, and that noise is frequent all over the Country.

Lizards, that are gray, and very common, the Snakes feed much on them, for I have taken several of them out of the Bellies of Snakes.

Snakes, about seven several sorts. The Rattle-Snake, so called from certain Rattles

at the end of the Tail: Theſe Rattles ſeem like ſo many periſhed Joints, being a dry Husk over certain Joints, and the common Opinion is, that there are as many Rattles or Joints, as the Snake is years old. I kill'd four or five, and they had each eleven, twelve, or thirteen Joints each; but the young Ones have no Rattles of a year or two, but they may be known notwithſtanding, being very regularly diced or checker'd, black and gray on the backs. The Old ſhake and ſhiver theſe Rattles with wonderful nimbleneſs when they are any ways diſturbed; their bite is very deadly, yet not always of the ſame force, but more or leſs Mortal, accordingly as the Snake is in force or vigour, and therefore in *June* or *July* much worſe, and more Mortal, than in *March* and *April*. This Snake is a very Majeſtick ſort of Creature, and will ſcarce meddle with any thing unleſs provok'd, but if any thing offend it, it makes directly at them. I was told a pleaſant Story of an Old Gentlemen, Col. *Cleyborn* as I remember was his Name, the ſame that ſent the Rattle-Snakes to the *Royal Society* ſome Years ſince. He had an odd Fancy of keeping ſome of theſe Snakes always in Barrels in the Houſe, and one time an *Indian* pretending to Charm them ſo as to take them by the Neck in his Hand without biting of him; the Old Gentleman cauſed a Rattle-Snake to be brought forth, the *Indian* began his Charm with a little Wand, whisking it round and round the Rattle-Snake's Head, bringing it by degrees nigher and nigher, and at length flung the Switch away,

and

and whisked his Hand about in like manner, bringing his Hand nigher ſtill and nigher, by taking leſs Circles, when the old Gentleman immediately hit the Snake with his Crutch, and the Snake ſnap'd the *Indian* by the Hand, and bit him very ſharply betwixt the Fingers, which put his Charm to an end, and he roared out; but ſtretch'd his Arm out as high as he could, calling for a ſtring, wherewith he bound his Arm as hard as poſſibly he could, and clapt a hot burning Coal thereon, and ſinged it ſtoutly, whereby he was cured, but looked pale a long while after. And I believe this truly one of the beſt ways in the World of Curing the Bite either of Viper or Mad Dog. I was with the Honourable Eſquire *Boyle*, when he made certain Experiments of Curing the Bite of Vipers with certain *Eaſt-India* Snake-ſtones, that were ſent him by King *James* the Second, the Queen, and ſome of the Nobility, purpoſely to have him try their Vertue and Efficacy: For that end he got ſome brisk Vipers, and made them bite the Thighs of certain Pullets, and the Breaſts of others: He applied nothing to one of the Pullets, and it died within three Minutes and a half, as I remember; but I think they all recovered to which he applied the Snake-ſtones, tho' they turned wonderful pale, their Combs, *&c.* immediately, and they became extream ſick, and purged within half an hour, and the next morning all their Fleſh was turned green to a wonder, nevertheleſs they recovered by degrees. The manner of the Application was only by laying on the Stone,

and

and by two cross-bits of a very sticking *Diaculum* Plaister binding it on, which he let not lie on past an hour or two, but I think not so long, took the Stone off, and put it into Milk for some time; some Stones were of much stronger Vertue than others. I proposed a piece of unquench'd Lime-stone to be apply'd to see whether it might not prove as powerful, but know not whether ever it was tried. But here one telling Mr. *Boyle* the Story of this *Indian*, he approved the method of Cure, and said, an actual Cautery was the most certain Cure. The Poison, both of Viper and Mad-Dog (as I conceive) kill by thickning of the Blood, after the manner that Runnet congeals Milk when they make Cheese. Vipers, and all the Viperous Brood, as Rattle-Snakes, *&c.* that are deadly, have I believe their Poisonous Teeth Fistulous, for so I have observed that Vipers Teeth are, and the Rattle-Snakes very remarkable, and therefore they kill so very speedily by injecting the Poison through those Fistulous Teeth into the very Mass of Blood; but the bite of Mad-Dogs is oft of long continuance before it get into and corrupt the Mass of Blood, being it sticks only to the out-sides of the Teeth, and therefore when they bite thro' any thickness of Cloaths, it rarely proves Mortal, the Cloaths wiping the Poison off before it come to the Flesh. A Girl that was bit about *New-Years Day*, continued well till *Whitsontide*, when coming to see certain Friends in our Parts, she fell very ill, and being a Poor Girl, they came to me; it pleased God I recovered her. Sometime after

after she returned to give me thanks for saving her Life, being two Persons that were bit with the same Dog, were dead, whilst she remained under Cure, and therefore she was the fullier convinc'd she owed her life to me; but of this I shall give a more particular Instance by and by. But the Poisons of Vipers seems to be like the injecting of Liquors into the Veins of Creatures; Dr. *Moulin* and I made many Experiments of this Nature together, and I have made many more by my self. We once, I remember, injected half a Dram of Allom into the Jugalar-Vein of a Dog before the *Royal Society*, (the Allom being only dissolved in a little Water) which within something less than one Minutes time was so absolutely dead, as not to have the least Convulsive Motion; and I have done the like with many other things besides Allom, but with some things it is more curdled and broken, than with others; and will differ much both as to colour and consistence. Salt-Petre kills much as quickly as Allom, but then the Blood in the Heart looks very florid, smooth, and even. I wish some Person of Observation and Leisure would prosecute these sort of Experiments, and make Injections of the several things most used in Physick into the Veins of Creatures, both in quantities, and into different Veins, as into the Thigh-veins of some Dogs, and Jugalars of some others, and in much lesser quantities of such things as kill suddenly; for in the little time I have spent in these sort of Experiments, I easily perceive notable discoveries might be made thereby: One Dog that lived

lived became Lame and Gouty; another with Quick-Silver died in about Sixteen Weeks time, Consumptive, and I discovered Quick-Silver in the Impostumated parts of his Lungs. *Query*, Whether some Persons that have been Flux'd, or used Quick-silver Oyntments, and the like, and afterwards become consumptive, owe not their Distemwer to the abusive use of a most excellent Remedy? Much after the same manner, the subtile Quick-Silver getting into the Mass of Blood by degrees, through its ponderosity settles in the Lobes of the Lungs, and causes Ulcers there. But to return: The Poison of Vipers and Mad Dogs I suppose kill by thickning of the Blood, as many Malignant Fevers, also do; in all which Cases, I look on Volatil Salts to be the propereſt Physick, as keeping the Blood from congealing. I had a singular Instance hereof in a Gentleman of *Yorkshire*, bit with a Grey-Hound on the *Thursday*, not three Minutes before the Dog died Mad; he bit him in several places of the Hands, as he was giving him a Remedy: The *Monday* following the Gentleman was very ill, and came to our Town to an Apothecary his Acquaintance, who knowing not what to do, desired my Assistance. When I came, the Gentleman could talk, but every two or three Minutes he had violent Fits, and would tell us when they were over, that his Brains worked like Birm in an Ale-Fat, and seemed to Froth up at every Fit. The Apothecary had no Volatile Salt of Vipers; so I took the Volatile Salt of Amber, and ordered him Ten Grains in Treacle-Water every

every half hour: He told me every Dose seemed to clear his Brain, and cool it as perfectly, as if a Bason of Cold Water were poured on his Head, but it returned by degrees again: Having then a Volatile Salt by me that Vomits very well, I gave him a Dose thereof, it worked very well, and he was very much better after it: I then ordered him to continue the Volatile Salt of Amber once every four hours, and at each two hours end, that is betwixt, *Spec. Pleres Archonticon and Rue pouder'd ana gr.* 15. whereby he was so well recovered, that within two days he would needs go home, to look after some urgent Affairs, and afterwards found himself so well, that he forgot to return, and perfect the course; and I heard no more of him for half a Year, when I was fetch'd one Morning to him in great hast. He had been abroad, play'd the Good-Fellow, and in his return home, having rode a great days Journey, being weary, and I suppose finding himself indispos'd, he staid all Night in our Town, it being fortunately in his way. In the Morning when he should have got up, he could not stand, whereupon the Apothecary was sent for, and a Surgeon to Blood him, which was accordingly done, but he grew worse; for in this Case I look upon Bleeding to be very prejudicial, as well as in most Malignant Fevers, for thereby the Spirits are diminished, and the Blood congeal'd the sooner. When they had done all they could, and the Symptoms still increased, they at length sent for me. I never saw Man or Creature in that Agony in all my life, that I found him in,

Sense-

Senseless, and Mad, when at best, but every Minute the fiercest shiverings ran through him, his Eyes would first roll and then set, as if ready to start out of his Head, but above all, the Swelling and Luctation at his Breast, was as if he would burst, which went off with a prodigious sigh: All this I judge the Effects of the Heart labouring to discharge it self of the stagnating Blood, and the Nervous Convulsions as consequences thereof. And I am the more confirm'd in this, from what I saw in a Woman that was bit also with a Mad-Dog in the Leg, and fell ill the very day that she had paid the Chirurgeon for her Cure; and notwithstanding all that could be done, growing worse, they sent for me; I went, and found her with what is called a *Hydrophobia*: She would look earnestly after Drink or Water, and seem to desire it, but as soon as she began to drink, away it went, be it what it would, with the greatest Violence she could possibly fling it. I gave her the Vomit hereafter and also before mentioned, but she got but little of it down, and I had no more with me; nevertheless it so brought her to her self, that she could answer Questions, and I asked her, whether she was afraid of the Drink and Water, when she flung the Cups in that violent manner from her? She said No; but when she offered to drink, her Breast and Heart would not let her. I asked, whether through any Aversion or Fear? She said, No, she was very Thirsty; but when she offered to drink, it struck to her Heart, and stopped her Breath. That is, as I apprehend, the cold Drink passing down the Throat struck

struck a chilness in the Blood, and made it readier to stagnate: Besides the very act of Drinking, hindring the free breathing, conduced also much thereto; and therefore the Heart was so suddenly oppress'd, that she could not forbear flinging away whatever she had in her Hand. She complained also of a great rigour and stiffness or straitness of the Muscles of her Breast, so that possibly the Spiritous Liquor that flows in the *Genus Nervosum* may be congeal'd as well as the Blood; or the same Effects may be supposed notwithstanding to be the result of the condensed Blood clogging both the Heart and Lungs, so that the Breast may seem to be straitned therewith. The same I judge to be the cause of all the violent Luxations in this Gentleman, whose Fingers I looked on, and found the places where he had formerly been bit, turned blackish, and much inflamed about them, which confirmed me in my sentiment, that it was a relapse of his former Distemper, that is, of the Bite of the Mad-Dog. I told them, if any thing in the World would save his Life, I judged it must be the former Vomit of Volatile Salts; they could not tell what to do, nevertheless such is the Malignacy of the World, that as soon as it was given, they ran away and left me, saying, he was now certainly a dead Man, to have a Vomit given in that condition. Nevertheless it pleased God that he shortly after cried, *This Fellow in the Black has done me good*, and after the first Vomit, came so to himself, as to know us all. I vomited him every other day with this Vomit for three times,

and

and made him in the Interim to take Volatile Salt of Amber, and the aforeſaid Powders, and to waſh his Hands, and Sores in a ſtrong Salt Brine: to drink Poſſet-drink with Sage and Rue, and by this courſe, and the Bleſſing of God, his Life was ſaved, and he perfectly cured, for it is now four Years ſince, and he had had no Relapſe. I have cured ſeveral others by the ſame Method. Coll. *Spencer*, the Secretary of State in *Virginia*, a very Serious and Ingenious Gentleman, told me, that his Servant brought him word once that a Sow having farrow'd, a Rattle-Snake was got into the Den, and had kill'd the Piggs. The Colonel went to ſee the Snake, which they ſaid was ſtill coyl'd in the Den; there followed them two or three Mungrel Curs, and they ſat one of the Dogs at the Snake, which was too quick for the Dog, and ſnapt him by the Noſe, whereupon he ſet a howling, and run immediately into the adjacent River, and died very ſhortly after. Another of the Dogs upon the like attempt was bit by the Snake alſo, and fell a howling, and froathing, and tumbling; but being he died not ſo ſoon as the other Dog did, they fetched ſome of the Herb which they call Dittany, as having a great Traditionary Vertue for the Cure of Poiſons; they pounded it, and adding a little Water, expreſs'd the Juice, and gave the Dog frequently thereof, nevertheleſs he died within a day or two. The howling of the Dogs he ſuppoſed gave notice to the Sow, and made her come furiouſly briſling, and run immediately into her Den; but being likewiſe bit by the Snake, ſhe ſet up a terrible

terrible Squeak, and ran alſo into the River, and there died.

A Gentlewoman, that was a notable Female Doctreſs, told me, that a Neighbour being bit by a Rattle-Snake, ſwelled exceſſively; ſome days afterwards ſhe was ſent for, who found him ſwell'd beyond what ſhe thought it had been poſſible for the Skin to contain, and very Thirſty. She gave him *Oriental Bezoar* ſhaved, with a ſtrong Decoction of the aforeſaid Dittany, whereby ſhe recovered the Perſon: To the beſt of my Remembrance, it was he that told me, asking him afterwards, what he felt when the Snake firſt bit him? He ſaid, it ſeemed as if a flaſh of Fire had ran through his Veins.

Beſides the Rattle-Snake, there is the Blowing-Snake, an abſolute Species of a Viper, but larger than any that I have ſeen in *Europe*; it is ſo called, becauſe it ſeems to blow, and ſpread its Head, and ſwell very much before it bite, which is very deadly. It is Remarkable there is none of their Snakes there, make any of that hiſſing noiſe that ours in *England* make, but only ſhoot out their Tongues, ſhaking them as ours do, without any noiſe at all; this is a ſhort thick ſort of Snake, There is another ſort of deadly Snake, called the *Red-Snake*; I once narrowly eſcaped treading on the back of one of them: They are of an ugly dark brown colour, inclining to red; their Bellies are of a more dusky white, with a large ſtreak of Vermillion Red on eithe ſide; this too is of the Viper kind, but is not ſo ſhort, but its Tail is more taper and ſmall. The *Horn-Snake* is, as they

ſay, another ſort of deadly Snake; I never ſaw any of them, unleſs once, ſhortly after my Arrival in that Country, which I cannot atteſt to be the Horn-Snake, for I could not diſtinctly view it, being in a Thicket of *Sumach*, it was perch'd up about two Foot high in a *Sumach* Branch, its Tail twiſted about the Shrub, and about a quarter of a Yard ſtood bolt forward, leaning over the forked branch thereof: I could not ſee the Horn, which they ſay it has in its front, wherewith it ſtrikes, and if it wounds, is as deadly as the Rattle-Snake's bite. The Gentleman that was with me, told me it was a Horn-Snake; but being in haſt, and on Horſe-back, and the Snake in a Thicket, I could not ſee the Horn; but had I thought I ſhould never have ſeen more of them, I ſhould have took a little pains to have been better ſatisfied. This I think may not improperly be referr'd to the *Dart-Snakes*.

The *Black-Snake*, is the largeſt I think of all others, but I am ſure the moſt common; I have kill'd ſeveral of them full ſix Foot long, their Bite is not deemed Mortal, but it ſwells, and turns to a Running Sore; they feed upon Lizards, Mice, Rats, Frogs, and Toads, which I have taken out of their Bellies. I was once a Simpling in the woods, on a fair Sun-ſhine day, when I ſaw a Snake crawling on a Tree that was fallen, and licking with its forked Tongue as it moved; I ſtood ſtill to obſerve it, and ſaw it lick up ſmall Inſects and Flies with wonderful nimbleneſs, catching them betwixt the Forks of its Tongue.

The

The *Corn-Snake*, most like the Rattle-Snake of all others in colour, but the Checkers are not so regular, neither has it any Rattles: They are most frequent in the Corn-Fields, and thence I suppose so called; the Bite is not so venomous as the Black-Snakes.

The *Water-Snake*, a small Snake, I never saw any of them above a Yard long, though I have sometimes seen Forty or Fifty at once; they are of an ugly dark blackish colour: They say, they are the least Venomous of any.

Part of Two Letters from Mr. J. Hillier, *dated* Cape Corse, Jan. 3. $168\frac{7}{8}$. *and* Apr. 25. 1688. *Wrote to the Reverend Dr.* Bathurst, *President of* Trinity Colledge, Oxon; *giving an Account of the Customs of the Inhabitants, the Air,* &c. *of that Place, together with an Account of the Weather there from* Nov. 24. 1686. *to the same Day* 1687.

Cape Corse, Jan. 3. $168\frac{7}{8}$.

I Thought the Custom of destroying Slaves at the Death of great People had been abolish'd, and I was so inform'd; but we have seen that it is not; for *Oct.* 3. this Year, died *Ahen Penin Ashrive*, King of *Feton*, here at *Cape Corse*, where he had been long sick; the Fetishers had done all they could to save his Life, which was nothing at all to purpose; their Physick scarce extends to any thing but the Flux, and what we call the French Disease; his was a Consumption and an Asthma (if

(if I mistake not the Word) of a great continuance: so they fled to the Aid of their Religion, and according it seems to the Rules of that, they made several Pellets of Clay, which they set in his Room, in Rank and File, all sprinkled with blood; besides the several Muttons which they eat to his good Health. But that was of too little Force; so the Man died, having delivered his Sword to the Dy, who in the *Interregnum* was to be the principal Man, for the Kingdom is Elective, contrary to what we wrote before, and commanding him to be constant to the *English*, of whom himself had been a great Favourer, with a Threat, if he was not, of haunting him after his Death; he also appointed one of his Wives, whom he thought worthy of that unlucky Honour, to accompany him to the other World; the next Day he was carried to *Feton*, and buried there, *Nov.* 2. with the poor Woman we spoke of. Presently after, they that were considerable, or had a mind to seem so, sent in them that they had a mind to Murder in Honour of the King: how many there were 'tis hard to say, the highest Account gives 90, the lowest 50, the middle 70; the Blacks do not understand Arithmetick, so the Numbets they give in all Cases are very uncertain. I think there were about Eight from this Town, which will not hold Proportion to the highest rate; but 'tis like near *Feton* there might be more. They say also, that many more will follow at half a Years distance from his Death. The manner of the Execution of these poor Creatures I have not yet learnt, only that they

make them drink and dance, with a great deal of Bravery all the begining of the Day, and towards Night cut off their Heads, but whether by that they mean the common way of their Executions I am yet to ſeek.

After the Kings Funeral, the next thing was to chuſe a Succeſſor; ſo the People was called together at *Feton*, (I ſuppoſe by the Authority of the Dy) without inquiring any thing of their Freehold; they pitched upon Mr. *Dy*, though he was not of the Blood-Royal; the Reaſon was, as they ſaid, becauſe he had Power enough to do what he pleas'd, and they could do nothing againſt him; but he refuſed the Honour becauſe of the Charge 'twould put him to, and propos'd the Brother of the deceaſed King: So the Buſineſs ſtuck ſome time, but at laſt 'twas accorded, and he [King *Aſhrive*'s Brother] declared King, *Nov.* 18. his Name is *Abenaco*.

'Tis Wonder how they could diſpatch ſuch a Buſineſs, with ſo little Diſturbance; but I ſuppoſe there was no conſiderable Number that diſſented; otherwiſe it would ſcarce have been determined without Blood-ſhed; for it would ſcarce have been poſſible for them to have taken any Pole.

I ſaid it was doubt whether theſe Sacrifices died after the rate of their ordinary Executions; if you would know that, thus it is, the Creature that is condemn'd, is made to drink abundance of Palm-Wine, and to dance, every Body that will, in the mean time ſtriking or puſhing him, when that is over, as is ſaid, he is thrown down, his Face into the Sand, which whether it ſtifle him or not, I can't

can't tell, then his Legs are cut off below the Knees, and his Arms below the Elbow, afterward his Thigh and his Arms below the Shoulder, lastly his Head.

A Man would not expect any thing more barbarous than this; yet there is a Custom which has something worse; when any one has new Drums or Trumpets, 'tis necessary that they be consecrated with Humane Blood: I have known but one happen of this Kind, that was *Jan.* 7. 168$\frac{4}{7}$. when after the Man had been executed after the former rate, about Eight in the Morning; at one in the Afternoon, they drank Palm-Wine out of the upper part of his Skull, and this in the sight of all the Factors at *Cape Corse*,

I remember for the Unhealthiness of the Place, you proposed to inquire if it were Woody, and if any good might be done to it by cutting down the Woods, as has happen'd in many *American* Plantations; of that Matter this is what I can say.

The Shore lies almost East and West, expos'd to the Sea wholly upon the South, the Country is Hilly, the Hills not very high, but thick, clustering together, the Valleys between extream narrow, the whole in a manner cover'd with certain Shrubs, low, but very thick; what the People Till, comes not to above a Tenth part of their Ground; and where they do Till, it hinders not that within half a Year the Ground is over-grown as before, for they do not root up the Shrubs, but only cut, or sometimes burn them somewhat close to the Earth, so they spring again in a very little time; this is sufficient for

their planting the Corn, which they do by making little Holes in the Earth at a competent Distance, and putting Seeds into them.

It may be that if those Shrubs were destroyed, the Matter might be mended, which yet is not to be hop'd for, but by bringing the People to some kind of Industry, and that will not be easie; they are so wholly given to Lazineſs, and so intirely bred up in it, that there must be the greatest Change imaginable, before they become any whit tolerable; a Man may see their Temper by this, that though their Tillage be very easie, and the Earth yields many Hundreds for One, yet so little is the use they make of it, that One scarce Year brings them to danger of Starving, and though there be People enough, and every Man has Power of choosing what he will, that is not already Till'd by some other, yet not the Tenth Part, as we have said, is imployed: So that a Man would wonder what came in the French Man's Head to fancy them Industrious; but subtile they are, and diligent to Cheat any Man that is not cautious enough to avoid it.

So that the Fault of the Wood is (by the Lazineſs of the People) without any Remedy. But there may be something in the Earth it self; the Water which they have here in Pits (Rain Water for the most part, but yet strain'd through the Earth) has a kind of Taste mixt of Sweet and Subacid, if I understand what I say, I am told 'tis of Vitriol, whether that be mischievous, you know better than I do.

But

But I take this for certain, since I have had it from good Hands, that at *Widdah*, which is one of the most unhealthy Places in *Guiney*, but 'tis not upon the Gold-coast, he that opens the Ground, though it be but to dig a Grave, runs the Hazard of his Life: So mischievous are the Steams from thence arising. It's possible there may be some such Steams here, only not so violent; though in *England*, I think, a Gravel or a Sand (which here are always uppermost for as much as I have seen) are esteem'd very wholesom Soils; under them is a kind of whitish Marle almost like Fullers-Earth.

For the Air, except what I have said before, I do not know what Fault it has; 'tis extream hot, 'tis also subtile and piercing, and I believe enters a Man's Body easier than that in *England*. It has been clearer than that uses to be one day with another, even this last Year, which has been the wettest and most cloudy which has happen'd a long time; I think to give you an Account of the Weather in it as soon as I have time to transcribe.

For the Age of the Inhabitants, 'tis very uncertain, because none of them keep an Account of it; there are some of them very Grey, but if the Country be to them unhealthy, Grey Hairs may come early: I think there be many more Funerals here than at *Oxford*, though that be a much larger Place, especially in the Rain-times, which to us are always healthful.

I think that much of the Mortality (not all) that happens among Strangers, is the Effect of their ill Diet, and ill Government

of

of them selves; for they eat but little, having neither Stomach nor Mony to buy what they want; but they drink excessively, being for that more readily trusted, and of Liquors very hot and Spirituous; and if any chuse the cold rather, his Stomach is chil'd, and he is in danger of a Flux or an extream Looseness, and that immediately.

There is another thing, Men guard themselves less from the Air than in any other Places trusting to the Heat of the Climate, and receive the cool of the Evening with only a Shirt. Now I think that the Air, tho' not so cold, is much more subtle and piercing here, than in our Country, it corrodes Iron much more, not by the Moisture, for it is not so moist, and besides it does it in the dry Weather too. Perhaps there are some other Effects to evidence the same thing; besides that, the Diet which most Men procure, is not extraordinary, and the passing by Canoes from one Place to another has a Danger in it beside that of the Sea.

Cape Corse, Apr. 25. 1688.

I Promised in my last to give you an Account of the Weather at *Cape Corse* for the last Year, which Account I have inclosed in this; it is as exact as I could give; 'tis a thing which has been very little observed, whether it deserves to be more, I do not know. That Year has had the most Rain of any that can be here remember'd; yet the Mortality was much less than the Years before; so that perhaps Wet is not that which makes the Country unhealthy; though we had

had very many Sick, especially in *June* and *July*, whose Diseases were not Mortal.

If you give your self the Trouble to read the inclosed, you will find often mention of a Tornada, which is a violent Storm of Wind, followed commonly by Rain, but not always; the Wind ceases not presently upon the Rain, but after sometimes it does: In this Place it comes (as does an Hermitan) most frequently from the North, taking in the next Points, whether to the East or West, but chiefly the East, though I have seen both that and an Hermitan from other Points; so the Account is not without Exception; there are in it short, uncertain Blasts from all Quarters, which I believe reach not many Yards, but the general Wind (for ought that I see) is not so unconstant; Vessels that go to Windward are help'd by them, when they are not over strong, for they are opposite to the Sea Breze, and they can steer by them a regular Course; which sure they could not do, if they were very irregular. They never fail to give warning before hand, though sometimes after that warning they do not follow; there is a very black Cloud appears afar, in which if there be a kind of white Spot, the Wind will be most, if not the Rain; this the Sailors say. Sometimes there is that Mark, sometimes not, though I doubt the Prediction from it is not very certain; as neither are any perhaps of that kind.

An Account of the Weather at Cape Corse *in* Guiney, *from Nov.* 24. 1686. *to the same Day,* 1687.

Lat. N. 4*d.* 49*m.* *Nov.* 1686.

24. AND 25. Clear and Hot.

26. About 2. *a. m.* a Storm of Rain with Thunder for ½ Hour.

27. At the same Hour, Rain which lasted somewhat longer.

28. About 5. *a. m.* Some Rain, afterward Misty, about 10. extream hot.

29. About 2. *a. m.* a great storm of Rain, slacking often but renewing again, it lasted about an Hour; the Day after clear.

December, 1686.

Thence to *Dec.* 7. clear; then cloudy in the Morning; between 12. and 1. *p. m.* a Shower lasting about ½ Hour. Thence clear and hot.

10. A little Mist in the Morning, otherwise very clear and hot; so till 15.

15. And some Days after somewhat thick, especially in the Morning.

19, And 20. We had a dry North, and North-Easterly Wind, call'd an Hermitan, and it overcame the Sea-Brize; found very ill for the Eyes, and most Men complained of a Feverish Temper; it was parching, but rather colder than ordinary.

21. It ceased; a clear Air and very hot.

23. We had the Hermitan again; but the Morrow it ceased; then and

25. Some Clouds, but no Rain.

Thence

Thence to 29. clear and hot; 29. the Hermitan returned, but did not continue.

Thence Clouds sometimes, but no Rain till *Jan.* 2.

This Month we had Three Funerals, one being Sick of the Flux laid violent Hands upon himself, through impatience of the Pain, the 3d Day.

The Second upon the 25th died convulsively, not having been Sick above one Day.

The Third, *Dec.* 27. died of a Dropsy, which had succeeded a tedious Flux.

January, $168\frac{6}{7}$.

2. About 5. *a. m.* Rain for $\frac{1}{2}$ Hour between 7. and 9. an Hour; from $\frac{1}{2}$ Hour past 9. to 1. *p. m.* the rest cloudy.

5. At 2. *a. m.* about $\frac{1}{2}$ Hour.

8. At 1. in the Morning about an Hour, the Days between somewhat cloudy. Thence to 12. extream hot.

12, And 14. somewhat cloudy otherwise the Heat continued.

17. At 7. *p. m.* a Tornada for above $\frac{1}{2}$ Hour, and about 12. at Night another; but the Heat very little abated.

22. Between 5. and 6. *p. m.* began a Tornada, which lasted above an Hour very violent, with great Claps of Thunder and Lightning. Tank fill'd 1 Foot.

23. In the Morning a great Mist, after 8. clear and extream hot.

The latter end of *January*, and the begining of *February* commonly Misty in the Morning; after extream hot.

I find no Funeral this Month. *Febru-*

February, $168\frac{6}{7}$.

Beginning of *February*, as before.

10. Somewhat Cloudy and cool, till then we were troubled with Coughs, for the most part; about this time they ceased.

So the 11th, toward Night, Thunder afar off, and expectation of a Tornada: but it fail'd.

12. Extream hot.

13. A stronger Wind than ordinary from Sea-ward.

14. Something like an Hermitan, but not from its usual Quarter. Clear and hot till about 2. *p. m.* then cloudy but no Rain.

Thence to 22. extream hot and clear.

From 22. to *March* 1. some flying clouds without Rain; sultry hot and unwholesom.

24. Some shew of a Tornada, but it past away.

This Month we had two Funerals, but their Diseases I find not.

March, $168\frac{6}{7}$.

The beginning of *March* as the latter end of *February*.

5. From 6. *a. m.* for an Hour and $\frac{1}{2}$. a violent Tornada; the Day after cloudy. 6. Clear.

7. At Night Lightning and Clouds afar off; but nothing followed,

Thence to 11. clear and hot.

11. About 5. *a. m.* a violent Rain for almost $\frac{1}{2}$ Hour.

12. And 13. cloudy. 14.

14. About 4. *a. m.* a gentle Shower but lasted not long.

15. Between 6. and 7. *a. m.* a few Drops, and likelyhood of more, but nothing followed; both Days cloudy.

16. Extream hot.

17. Somewhat cloudy.

Thence to 20. extream hot.

20. Cloudy; about 10. *a. m.* some few Drops.

21. Very hot.

22. In the Morning hot; about 12. a violent Rain for a Quarter of an Hour.

23. Clear.

24. About 2. *a. m.* Rain for about ½ Hour; the Day after clear.

Thence to *April* 3. clear and extream hot.

No Funeral.

April, 1687.

3. At 3. *p. m.* a violent Tornada, but only some few Drops of Rain; at 5. *p. m.* a little more Rain.

4. Cloudy by Fits, otherwise very hot.

5. Hot and clear.

6. In the Morning hot, about 2. *p. m.* cloudy; about 3. some Drops of Rain, in the Evening the Clouds dispersed.

7. Clear and hot.

8. Between 12. and 1. in the Morning, a violent Rain for near an Hour; after 2. one somewhat longer; the Day after there appeared to have been much Rain; Tank fill'd Two Foot and somewhat more.

9. About 7. *a. m.* some Drops cloudy all Day.

10.

10. Cloudy about a 11. *a. m.* a small Mist.

11. Presently after Midnight it began to Rain and lasted till 6. *a. m.* a great part of the time very violently, it began with a strong Tornada; Tank above Three Feet. The Day after some Clouds; otherwise extream hot.

So also 12, and 13.

14. About 5. *a. m.* a Shower for ½ Hour, between 6. and 7. *p. m.* another of the same continuance, the Day between extream hot.

So 15. 16. A Shower for ½ Hour, it began with a violent Tornada, the Rain not much, afterward cloudy.

17, And 18. Clear.

19. Clear also, about 7. *p. m.* a considerable Wind and some Drops of Rain.

20. Clear but Windy.

21. Between 12. and 2. moderate Rain for near an Hour.

22. About 2: *a. m.* moderate Rain almost an Hour; at 11. *p. m.* a short Shower and gentle; the Day between extream hot.

23. Cloudy about 10. *a. m.* some Drops.

24. Extream hot.

25. About 1. *a. m.* Rain for near an Hour; the Morning after hot; Afternoon cloudy; most part of the Night, Thunder and Lightning, but no Rain.

26. At 7. *a. m.* strong Rain for ½ Hour, after that a little Mist; Afternoon, from 12. to 15. it rain'd unequally, but the most part moderate.

27. Extream hot.

28. About 12. Somewhat Cloudy, at 3. *p. m.* it began to Rain, and lasted about an Hour and ½; after cloudy and some Drops; in the Night a Shower or two.

29.

29. Cloudy. Thence to *May* 6. sometimes cloudy; but for the most part violent hot.

This Month we had Three Funerals; one the 3d of a Fever, another on the 19th of I know not what Pains in the Guts, another 24. of the Flux.

The 15. and some Days following, there settled upon the Castle Walls, certain Swarms of wing'd Ants, a little bigger than Bees; they would bite very severely, and were blown up with Powder.

May, 1687.

Till the 6. as before.

6. In the Morning cloudy, a little after Noon some Wind, followed by gentle Rain, which lasted till 3. *p. m.* after cloudy.

7. Hot. 8. Cloudy about 10. *a. m.* a gentle Shower for $\frac{1}{4}$ Hour; about 8. *p. m.* a very violent Storm of Wind and Rain, but it quickly grew moderate, and lasted in all not above $\frac{1}{2}$ Hour. 9. Clear.

10 About Noon a violent Shower for $\frac{1}{4}$ of an Hour; after 8. *p. m.* another as long, but not so violent; past 9. another shorter.

11. Clear. 12. Clear, past 9. *p. m.* a very violent Tornada with Rain, which lasted somewhat more than 2 Hours.

13. Between 12, and 1. in the Night, a short Shower; about 9. *a. m.* some Drops; so also in the Afternoon but nothing considerable; cloudy all Day.

14. Cloudy; at 9. *a. m.* a violent Rain for $\frac{1}{4}$; after gentle for above an Hour; about 3. *p. m.* some Drops.

15. About 3. *a. m.* Rain for ½ Hour; between 4, and 5. another; after foggy and cloudy, with some few Drops; about 7. *p. m.* a violent Tornada with Rain for near an Hour.

16. About 4. *a. m.* Rain for an Hour; after 8. for ¼ Hour; after 6. *p. m.* Rain and Wind, but both moderate, for ½ Hour; past 8. about as much.

17. About 4. *a. m.* a short Shower, after clear; 18. clear

19. Cloudy, about 10. *a. m.* some Drops.

20. Cloudy between 8 and 10. *a. m.* a Shower; first violent, after more moderate, till it ended in a kind of Mist; it lasted in all about 1 ½ Hour; the Day after clear, 21, and 22. clear.

23. In the Afternoon cloudy; about 6. *p. m.* some Drops; the Night after, a Shower, not considerable.

24. Hot, about 10. *p. m.* a little Shower.

25. Clear; 26. in the Night some little Rain.

27. Held up; 28. at 9. *p. m.* a short Shower.

29. At 5. *a. m.* Rain till near 7. a little past 7. till 9. after cloudy.

30. Cloudy; the Night after some Rain.

31. About 8. *a. m.* Rain for ½ Hour; from 9. till 12. it rained for the most part very violently; before 1. another Shower for ½ Hour; from a little after 2. till 5. with very great Thunder.

One Funeral on the 25th after but Three Days Sickness, of which I can give no account.

The

The beginning of this Month, we had an extraordinary Number of Toads, which after some time were not to be seen.

The 14th we had wing'd Ants, as before.

24. Was the first Corn, the Seed-time having been the middle of *March*.

June, 1687.

1. About 4. *a. m.* Rain for an Hour; past 1. *p. m.* for ½ Hour; the rest cloudy and misty.

2. From 2. *a. m.* till 5. continual Rain, 'tis said there was some before; from 9. *a. m.* till ½ Hour past 6. *p. m.* continual Rain, sometimes very fierce; from ½ Hour past 9 at Night, Rain till past 10.

3. From 6. to a little past 7. *a. m.* a very gentle Rain, from thence till 1. *p. m.* most commonly very fierce; thence for a little while more moderate; but it rain'd hard again till 6. *p. m.* then it drop'd but slowly, and so continued till about 7. in the Night some little Rain.

4. About 8. *a. m.* some Drops, thence clear.

6. And 7. clear, except some few flying Clouds.

8. After 3. *a. m.* gentle Rain for near an Hour; then cloudy and some Drops, after 10. *p. m.* a Shower.

9. At 5. *a. m.* a gentle Shower, lasted till past 7. thence a very violent Rain till almost 9. some Drops after that; about 3. *p. m.* it began and rain'd till past 10. somewhat moderately.

10 Clear and hot.

11. Cloudy; about 8. *p. m.* a few Drops.

12. From about 2. *a. m.* till near 5. Rain, but not violent; a little before 6. a furious Storm of Rain, but little Wind; it lasted till ½ Hour past 7. about 3. *p. m.* a moderate Rain, till a little past 4. and from thence to 6. somewhat more than a Mist; the Night after it rained a little.

13. Cloudy; in the Afternoon it drop'd a little.

14. About 8. *a. m.* a few Drops.

15. Somewhat cloudy.

16. Extream hot; toward Night cloudy; about 5. *p. m.* a violent Shower for ½ Hour; from a little before 8. till past 10. it rained continually.

17. From 4. *a. m.* till almost 6. gentleRain; so from a little past 6. till past 7. thence till past 3. *p. m.* cloudy, and now and then some Drops; then a violent Shower for ⅛th of an Hour; half an Hour after 4. it rain'd again and continued till past 10. for the most part very furiously; with some little Intermission it rain'd all Night.

18. At 3. *a. m.* it rained very fiercely; about ½ Hour after 6. it held up, but cloudy still; from 8. *a. m.* till past 3. *p. m.* it rained, but moderately; then it held up a little, but rained after till past 6. all Day cloudy, and at Night a great Fog.

19. About 9. *a. m.* some Drops; from 1 till past 3. *p. m.* very gentle Rain.

Thence to the First of *July*, foggy, Morning, sometimes hot, but for the most cloudy, and more temperate than could be expected from the Climate.

Two

Two Funerals, one the 9th of an Asthma; the other 21. of a Fever.

We saw some Sorts of Insects not usual here, whether monstrous or not, I cannot tell. The most notable, a kind of Spider, about the Bigness of a Beetle, the Form nearest of a Crab-fish, with an odd kind of Orifice visible in the Belly, whence the Web proceeded.

July, 1687.

1. Extream hot.

2. Foggy in the Morning; about 9. *a. m.* a few Drops; after clear.

3. In the Morning a great Fog; about 9. *a. m.* it rained small Rain for near an Hour; toward night more foggy than ever before; about 6. *p. m.* small Rain for a little time; from 8. till past 9. somewhat more brisk Rain, after that it cleared up.

4. From 9. *a. m.* to 3. *p. m.* small Rain, the rest foggy; between 10. and 11. *p. m.* some Rain.

5. From 2. *a. m.* till past 8 constant Rain, sometimes very fierce, sometimes moderate; about 10. *a. m.* some Rain; between 2. and 3. *p. m.* it began to Rain, but continued not long from 8. *p. m.* to 10. Rain.

6. From about 2. *a. m.* to 6. Rain, after fair.

7. Foggy and cloudy; between 7. and 8. *a. m.* some Drops.

8. Foggy in the Morning, otherwise clear and hot.

9. About 1. *a. m.* a smart Shower, between 3. and 5. some more Rain, the time of which

we know not exactly. The Day after foggy.

10. Very dull and cloudy; from 3. *p. m.* till Night a very great Mist.

11. Tolerably clear, and very hot, yet somewhat foggy Morning and Evening.

12. Cloudy; thence to 15. in the Morning and Evening foggy; else very hot.

15. Cloudy; about 10. *a. m.* some Drops; from half an Hour past 2. till 4. moderate Rain; about 7. some Drops.

16. Cloudy, several times it drop'd a little but nothing considerable.

17. a little before Day, a short Shower; after cloudy; thence to 20. foggy Morning and Evening, and the most part cloudy.

20. Very clear all Day, and extream hot.

21. Not foggy at all; yet somewhat cloudy, but about Mid-day it cleared up.

22. And 23. very clear and extream hot.

24. Cloudy in the Morning; after as the Two last.

25. Cloudy but not misty nor foggy, sultry hot.

26. In the Morning cloudy, after extream hot.

27. Hot and clear.

28. Thin Clouds, through which the Sun shone very hot.

29. And 30. cloudy.

31. About 3. *a. m.* Two short Storms of Rain, the Day after clear and hot.

Two Funerals, one the 17th drowned; the other 21. of a Fever.

Au-

August, 1687.

To 5. clear, for the most part in the Mornings cloudy; but without Fogs; sometimes very hot.

5. About 5. *a. m.* a Shower near an Hour long, about 7. another for ½ Hour, till 10. some small Rain; thence cloudy till 1. about 7. *p. m.* a few Drops.

6. Cloudy all Day, sometimes it drop'd a little.

7. about 2. *a. m.* violent Rain, with Wind for above ½ Hour. The Day after cloudy.

8, And 9. cloudy and foggy.

10. More foggy than ordinary; about 10. *a. m.* a great Mist, or small Rain for most part of the Day after.

11. Foggy as the former and Misty; between 8, and 9. *a. m.* a Shower of small Rain; after Noon clear.

12. Small Rain in the Morning; after as 11.

13. Clear and hot, the Land Breze very strong.

14. Cloudy all Day, the Land Breze turn'd to a kind of Hermitan, but not troublesom, nor continued beyond this Day.

15. Cloudy, several times very misty, and some small Rain.

16. Cloudy, but no Mist; after Noon clear.

Thence to 22. clear and hot, but the Nights colder than at other times,

22. At 6. *p. m.* cloudy, a Wind Tornada but moderate, with some few Drops of Rain very large.

23. Clear and hot.

24. Cloudy and misty at first; about 10. *a. m.* clear and hot.

25. Clear and hot.

26. Very foggy, Morning and Evening; for the rest hot.

27. From 5. to 10. *a. m.* it rain'd smartly; thence cloudy, about 2. *p. m.* it clear'd up for a while; about 9. *p. m.* a sharp Rain for ½ Hour.

28. Between 12, and 3. *a. m.* it rained about Two Hours; about 7. some few Drops, after Cloudy, in the middle of the Day, it clear'd a little, but quickly overcast again.

29. In the Night some Rain; at 7. *a. m.* Rain for ½ Hour; till past 12. a very thick Mist; about 3. *p. m.* clear; at Night a very thick Mist.

To the end cloudy and Misty.

Three Funerals, 6. one of a Fever, 7. another of a Consumption, 29. a third of a Fever.

September, 1687.

1. And 2. as the last.

3. Some few Drops.

Thence to 8. cloudy also and misty.

8. About 6. *p. m.* some small Rain; between 8. and 10. *p. m.* for an Hour pretty brisk Rain.

9. In the Morning cloudy and misty.

10. About 10. *p. m.* a little Rain.

11. Extream hot and clear; in the Night, considerable Rain for several Hours.

12. About 10. *a. m.* ſome ſmall Rain, the Morning very foggy, Afternoon clear.

13. Clear and hot.

14. And 15. In the Morning extream cloudy, and ſome Drops of Rain.

16. Clear and extream Hot.

17. Moderate, about 7. *p. m.* ſome Drops; at Night alſo ſome Rain, not conſiderable.

18. Cloudy; in the Morning about 12. ſome Drops; all this Week, Morning and Evening Foggy and thick.

19, 20, 21. Extream hot, the Fogs ceaſed.

22. About 1. *a. m.* ſome Rain, the Day after cloudy.

23, 24, 25. In the Morning cloudy after very hot.

26. At Night alſo ſomewhat Miſty, with many Flaſhes of Lightning, but no Thunder.

The like Flaſhes moſt Nights to the end of the Month, alſo often cloudy; at other times extream hot.

Two Funerals, one the 19th of a Fever, the other the 26th, whoſe Diſeaſe I do not know.

October, 1687.

1. About 3. *a. m.* a very fierce Rain for near an Hour, but milder toward the end; the Day after ſome flying Clouds.

2. About 4. *a. m.* a little Rain, the Day after as before; from 8. *p. m.* till 10. moderate Rain.

3. Cloudy; about 10 *a. m.* Rain for ſomewhat more than an Hour.

4. Cloudy between 8, and 10. *p. m.* a very smart Rain for above an Hour.

5. About 9. *a. m.* a little Shower.

6. About 5. *a. m.* a little Shower; another past 6. the Day after, and 7 extream hot.

8. Hot in the Morning; after Noon a shew of a Tornada, with Thunder, and a considerable Wind, but no Rain.

Thence to 16. some flying Clouds, but generally hot.

16. About 4. *p. m.* a little Rain, the Sun shining then, and the whole Day very hot; about 8. *p. m.* a very strong Tornada, Wind and Rain for about ½ Hour, afterward the Rain continued, but more moderate, for near Two Hours.

17. Clear and hot. 18. So too, except that about 3. *p. m.* there was a very short Shower.

19. And 20. somewhat cloudy.

21. About 7. *a. m.* a few Drops, after clear and extream hot, but quickly cloudy again; at 11. *a. m.* a violent Tornada, with very strong Rain and Thunder for near an Hour; thence all the time till Night, thick and misty; till 2. *p. m.* Rain.

22. Cloudy. 23. Clear and hot.

24. Somewhat cloudy; at 7. *p. m.* a little Rain.

25. Cloudy; about 11. *a. m.* Expectation of a Tornada, with some Thunder, but it ended in a few Drops of Rain about 1. *p. m.*

26. Aout 2. *a. m.* a very violent Tornada, and after the Wind, Rain not very fierce, which lasted till 8. *a. m.* the Day after cloudy.

27.

27. About 10. *p. m.* a violent Wind with Rain, but it lasted not long.

28. About 3. *a. m.* a strong Rain for near an Hour the Day after extream hot.

29, And 30. hot, yet with some Clouds.

30. Half an Hour after 11. *p. m.* began a very furious Tornada, the Wind was quickly over, but the Rain lasted with extream violence about Two Hours.

31. In the Morning very hot; about 2. *p. m.* a violent Tornada, with Rain and Thunder very near; it ceased sometimes, but beginning again, lasted till near 4. *p. m.* afterward cloudy.

Three Funerals, all upon the 6th Day, Two of Fevers, the other I know not.

November, 1687.

Clear and extream hot till the 6th.

6. About half an Hour past 1. in the Morning a very violent Rain for more than an Hour.

Thence to 14. except that the 11th at Night there were some few Drops, very hot.

14. Extream hot, about 9. *p. m.* a little Shower; the same Night about 1. a smart Rain for an Hour and half.

15. Hot; toward Night Cloudy and Foggy.

Thence to 19. very hot.

19. Some likelihood of a Tornada, but nothing followed.

20. About 1. *p. m.* a short Shower: about

a quarter past 2. another not much longer; till Night Cloudy.

Thence to 26. no Rain, but cloudy and somewhat cooler; yet some Days extream hot.

26. About 10. *p. m.* a short Shower.

27. About 2. another; the rest clear.

30. About 2. *a. m.* fierce Rain for about ½ Hour.

An

An Account of the Moorish *Way of Dressing their Meat (with other Remarks) in* West-Barbary, *from Cape* Spartel *to Cape* de Geer. By Mr. *Jezreel Jones.*

THE *Mauritanian* or *Barbarian Moor*, when he rises in the Morning, washes himself all over, and dresses, then goes to their *Fiama*, or Church, says his Prayers, and returns home, where his Wife, Concubine, or Slave, hath his Breakfast provided for him, which is sometimes made of Barly or Wheat-Gruel; for I have known both. It is made somewhat thicker than ours, till it be ropy; they put Origan, and other Herbs, powder'd, into it, which for such uses they keep dry'd all the Year; some will put a little Pepper, and other Spice. I have often been treated with warm Bread, fresh Butter, and Honey, in a Morning, which is not seldom used among themselves, an Hour or two after they have had Gruel; as also Hasty-Pudding, with Butter, and sometimes Butter and Honey, (as the Guests are, and according to the Ability of the Entertainers.) Some again give *Cuscusoo*, with Milk, others with Flesh, a third with Roots. It is to be observed, when any one hath a Guest or Guests in his

his House, the Neighbours bring their Dish to welcome him or them, on account of the Respect and Love they bear to their Neighbour, as well as to shew their Readiness to entertain the Stranger. This Practice is found constantly used throughout the whole Country among the *Moors*, one towards another, reciprocally. And I have as often found the like Civility, as I had occasion to take up my Lodging at any Place, where I was acquainted with any of the Inhabitants. The *Jews* likewise shew great Civility to any *Christian*, and treat him with what they have, as stew'd or bak'd Hens, Capons, hard Eggs, boil'd or roasted, which they press flat with Pepper, and Salt, Wine, Brandy, *&c.* They have generally the best Bread, and every thing else of the kind that they can get. They put Annis, and two or three other sorts of Seeds, in their Bread; one is black and angled, tasts almost like Carrot-seeds, and I think I have seen these sometimes used in Bread in *Spain*; I know not the Names of the other Seeds in *English*, nor any Language but *Arabick*. They esteem Honey as a wholsome Breakfast, and the most delicious that which is in the Comb, with the young Bees in it, before they come out of their Cases, whilst they still look Milk-white, and resemble (being taken out) Gentles, such as Fishers use: These I have often eat of, but they seem'd insipid to my Palate, and sometimes I found they gave me the Heart-burn.

In *Suse* I had a Bag of Honey brought by a Friend who made a Present of it, as being of great Esteem, and such as they present to

Men

Men of greateſt Note among them. This, he told me, I was to eat a little of every Morning, to the quantity of a Walnut; it was thick as *Venice* Treacle, and full of ſmall Seeds. I uſed to breakfaſt on it for ſeveral Days together, taking the ſaid quantity at a time; it always made me ſleepy, but I found my ſelf well, and in very good temper of Body after it. The Seeds were about the bigneſs of Muſtard, and, according to the Deſcription of them to me, and the Effects I found by eating the Honey and them, they muſt be a large ſort of Poppy-ſeed. The Honey was of that ſort they call in *Suſe*, *Izucanee*, or *Origanum*, which (the Bees feed on) and theſe Seeds were mixed with.

Cuſcus, or *Cuskſoo*, is the principal Diſh among them, as the *Olla* is in *Spain*: This is made of Flower of Wheat, and when that is ſcarce, of Barley, Millet, *Indian* Corn, *&c.* They ſhake ſome Flower into an earthen Pan, made on Purpoſe, which is not glazed, ſprinkling a little Water on the bottom of the Pan firſt, and then working it with both their open Hands flat, turning them backwards and forwards to grain it, 'till they make it much reſembling *Sago*, which comes from the *Eaſt-Indies*. They ſtew their Fleſh keeping their Pots cloſe covered, which are made of Earth, put the *Cuskſoo* into an earthen Cullender, which they call *Caskaſs*, B. *vid.* Fig. and this Cullender into the Mouth of the Pot, C. that ſo all the Steam which ariſes from the Meat may be imbibed by the *Cuskſoo*, which cauſes it to ſwell, and make it fit to be eaten: When itis enough, for they love every thing thoroughly

roughly done, they put this *Cuskſoo* out into the Diſh they ſerve it up in, which is ſomewhat like D. and the *Cuskſoo* being heaped up, they make (as it were) a Bed or Place for the Meat to lie in, then they put good ſtore of Spice, as Ginger, Pepper, Saffron, *&c.* This Diſh is ſet upon a Mat on the Ground, and four Men may eaſily ſit about it, tho' I have ſeen ſix and more at one Diſh; they ſit with their Buttocks upon the Calves of their Legs, with the bottom of their Feet on the Ground. If there are many to eat at this Meal, there are more Diſhes. This Diſh they have in uſe ſometimes at Breakfaſt, as well as Dinner and Supper, but it is commonly uſed for the two laſt Meals. They cover it with a thing made on purpoſe, ſomewhat like E. and it will keep hot enough two Hours. At a ſtately Entertainment they will have a Sheep roaſted whole, ſometimes a half, or a quarter, on a wooden Spit, or the moſt convenient thing they can find. They do not continually keep turning it, as we do, but leiſurely let one ſide be almoſt roaſted before they turn the other. The Fire is commonly of Wood burnt to clear Coal, and made ſo, that the Heat aſcends to the Meat. They baſte it with Oil, and a little Water and Salt incorporated. They let it be thoroughly roaſted; then they ſay, *Biſmiillah*, *In the Name of God*, after they have waſhed their Right Hands, and pulling the Meat in pieces, they fall to eating. It is to be noted, that they never uſe but their Right Hand in eating, and one holds whilſt the other pulls it aſunder, diſtributing the pieces to the reſt, as he pulls it off,

off. They seldom use a Knife, and a Fork is a strange thing among them. They are dextrous at this way of carving, and never flinch at the Heat or warmth, for that would look mean, and might occasion one more bold to take his Office upon him to perform. When they have done, they lick their Fingers, and as often as they have a hot Dish, they wash their Hands afresh. Then they have *Alfdoush*, or *Virmizzelli*, with some Meat on it, stew'd Meat, well spiced, with savoury Broth; which after they have eat the Meat, they dip their Bread in the Sauce, or Broth, and eat it. They are cleanly in their Cookery, and if a Hair be found it is a capital Crime, but a Fly not, because it has Wings, and may get in after it passes from the Cook's Charge or Management; to be well and strongly season'd is no great Fault; and if one should say it is too high of Pepper, they'll reply, it is better to be *Ah* than *Faugh*; alluding to the Differences between a strong, high, or hot, and savoury Taste, and an insipid, watry, or unpleasant. *Cubbob* is small pieces of Mutton, with the Cawl of a Sheep wrapped on them. Some make good *Cubbob* of the Liver, Lights, and Heart. They Pepper and Salt them, and put Sweet Herbs and Saffron into them, and then roast them, and when they dish them up, squeeze an Orange or two on them. Thus they use commonly in their stew'd Meats, Lemon and Orange for Roast or Fish.

Elmorosia is another: This is pieces of Beef, of Cow or Camel, stew'd with Butter, Honey, and Water; some will put *Rob* of Wine among

it; they add Saffron, Garlick, or Onions, a little Salt, and when 'tis enough, serve it up. They esteem this a delicious Dish, used mostly in the Winter, and say it is good against Colds, notwithstanding they say Beef is cooler than Mutton. They have a piece of good Housewifry for a ready Dish, which is likewise appropriated to the Winter Season; and this I will give an Account of before I have done. Then they will treat you with Hare stew'd, stew'd and roasted Hens and Partridges: These they disjoint, and let stew in Water, and Oil, or Butter, if they are not fat enough of themselves. When they are almost enough, they beat a couple of Eggs, mix them with the Liquor, with Juice of Lemon or Vinegar, which they usually have very good, and serve it up.

Then you may have more baked and roast, and another Dish of stew'd Meat, which for its Goodness would be esteem'd among us: They take a Leg of Mutton, cut off the fleshy part, leave out the Skin and Sinews. This Flesh they mince very fine (with two Knives, one in each Hand) by holding them across, which they manage with great Dexterity; they also mince some Suet, Parsly, Thime, Mint, *&c.* Then they take Pepper, Salt, and Saffron beaten together, and some Nutmeg; all these they add to the rest, with about half a handful of Rice; they cut an Onion, of the best sort, half through, and take off the first Lay, as not so fit for use, unless it be thick. (They that are curious take out the inner Skin, saying it is not wholsome, and bad for the Eyes, it being

the

the worst thing in an Onion, which otherwise would be the best of Roots.) This Lay they fill with forc'd Meat, then the next, and so on, which makes them look like so many Onions; some they put up in Vine-leaves of the best they can find for their purpose. Whilst this is doing, the Bones and Residue of the Leg of Mutton, being in moderate pieces, are stewing, with as much Water as will just cover them; then they put on their forc'd Meat-Balls a top of the Meat, and a green Bunch of Grapes upon them, cover it, and let it boil till thoroughly enough. This I think, is one of their best Dishes, which they often use in *Fess* and other Cities *Pillowe*, or *Piloe*, is a Dish very well known, made with Rice boil'd, with a good Hen, Mutton, and Spice, the Flesh and Fowl being put on the Rice in a Dish as *Cuskscoo*, and so served up.

A Bustard, which they roast and stew, and make an excellent Dish of its Guts, I eat of it once; to me it seemed very pleasant and savoury, and very grateful to the Stomach. This Bird is fit for their King's Table, as likewise the Hedge-hog, of which I will give an Account anon. Then they have *Ragous*, made with Sparrows, Pidgeons, *&c.*

Their Drink is plain Water, or Milk, and sometimes *Rob* of Wine mixed with Water. I was once treated with this by the Bashaw of *Suse*, *Abdolmeleck ben Alchotib*, and there was brought to me a great Bowl which held above three Quarts; he told me there was not above half a Pint of this *Rob* in it, and the rest was filled up with Water. It was very generous

and pleasant, and tho' I did not drink a quarter of it, yet I found the Strength in half an Hour. This they say is a Remedy against Cold likewise, and pretend to take it medicinally; tho' *Rob* of Grapes is lawful according to their * Law. Under this Pretext, many *Fessee* Merchants, to make *Rob*, or Vinegar, press all the Grapes in their Vineyards, put it up in great Jars, under Ground, and keep it long, so that it proves excellent Wine. When four or five merry Companions, with every one his Mistress, appoint to be merry, they go out to their Vineyard or Garden, have Musick, and all or most of these Dishes, and there sit and carouse over a great earthen Bowl full of Wine, of about four or five Gallons, and so drink round in a Cup that will hold almost a Pint, like a large Tea Dish, till there is none left; it often happens that they do not part till they have made an end of the whole Jar, which seldom is less than a Weeks time. I have known some that have been nine Days successively drunk; those that are known to drink Wine or Piss standing, their Testimony will not be valid in Law.

* *Alcoran*

In a Morning, during this time of Merriment, they are for some savoury Bit, *Pickled Fish*, or *Escaveche*, or *Elcholle*. They are great Lovers of Fish, and have as great Variety and very good, which they fry in *Organ Oil*, stew, roast, and bake, with good store of Spice, Onions, Garlick, Cummin, Parsly, and Coriander. The *Escaveche*, or fry'd Fish, is cut in thin slices, and put into Vinegar, with the aforesaid Spices, adding Saffron,

and

and Pepper, *&c.* It will keep above a Month, and this they have commonly, as also pickled Limes, Olives, Capers, *&c.* They eat parched *Garavancas*, parched Almonds, and Beans, which they parch in a Pan with Water and Salt. These, and other things, they have to relish their Glass of Wine, or give them a fresh Appetite to drink. They say, to cure the ill Effects of a drunken Bout, is, to take a swinging Cup of the same Liquor, which invites them to more, and so on.

But I have left some Dishes, by this Digression, to give an Account of their extravagant Mirth.

The Hedgehog is a princely Dish among them, and before they kill him rub his Back against the Ground, by holding its Feet betwixt two, as Men do a Saw that saws Stones, till it has done Squeaking; then they cut its Throat, and with a Knife cut off all its Spines and singe it. They take out its Guts, stuff the Body with some Rice, sweet Herbs, Garavancas, Spice, and Onions; they put some Butter and Garavancas into the Water they stew it in, and let it stew in a little Pot, close stopped, till it is enough, and it proves an excellent Dish. The *Moors* do not care to kill Lamb, Veal, nor Kid, saying it is a Pity to part the Suckling from its Dam. They eat with their boil'd Meat, many times Carrots, Turnips of two or three sorts, Cabbage, Beans, and Pease, *&c.* which they have plenty, and very good. I have eat of Porcupine stewed, which much resembled Camels Flesh in Tast, and that is the neareſt to Beef of any thing I know.

I come now to give an Account of the *Alcholea*: It is made of Beef, Mutton, or Camel's Flesh, but chiefly Beef, which they cut all in long slices, salt it well, and let it lie twenty four Hours in the Pickle. Then they remove out of those Tubs, or Jars, into others with Water, and when it has lain a Night, they take it out, and put it on Roaps in the Sun and Air to dry; when it is thoroughly dri'd, and hard, they cut it into pieces of two or three Inches long, and throw it into a Pan, or Chauldron, which is ready, with boiling Oil and Suet sufficient to hold it, where it boils till it be very clear and red, if one cuts it, which, taken out, they set to drain: When all is thus done, it stands till cool, and Jars are prepared to pot it up in, pouring the Liquor they fried it in upon it, and as soon as it is thoroughly cold they stop it up close. It will keep two Years, it will be hard, and the hardest they look on to be best done. This they dish up cold, sometimes fry'd with Eggs and Garlick, sometimes stew'd, and Lemon squeezed on it. It is very good any way, either hot or cold.

Before I conclude, I willingly give an Account of their Travelling-Provision, *viz.* Bread, Almonds, Raisons, Figs, hard Eggs, cold Fowl, *&c.* But what is most used by Travellers, is *Zumeet*, *Tumeet*, or Flower of parched Barley for *Limereece*. These are not *Arabian* but *Shilha* Names, so I believe it is of a longer standing than the *Mahometans* in that Part of *Africk*. They are all three made of parched Barley Flower, which they carry

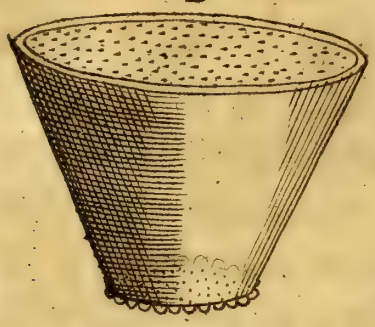
carry in a Leather Satchel. *Zumeet* is the Flower mixed with Honey, Butter, and Spice; *Tumeet* is the ſame Flower done up with *Organ Oil*; and *Limereece* is only mixed with Water, and ſo drank: This quenches Thirſt much better than Water alone, ſatisfies a hungry Appetite, cools and refreſhes tired and weary'd Spirits, overcoming thoſe ill Effects a hot Sun and fatiguing Journey might occaſion. This among the Mountaineers of *Suſe* is uſed for their Diet as well at home as on their Journey. All things taken in Game, as Hawking, Hunting, and Fowling, are lawful for them to eat, if they take it before it be dead, ſo that they can have time to cut its Throat, and ſay, *Biſmiillahe*; or if he is known to be an expert Man at the Game, and ſays thoſe Words before he lets the Hawk take its Flight, lets ſlip the Grey-hound, or fires his Gun, it is lawful; all (I ſay, but Swine's Fleſh, and what dies of its ſelf) they have Liberty to eat, and may ſell it. They tell us there is but one Part about the Hog or Swine that is unlawful, which they do not know, and are obliged to abſtain from the whole; but if they knew it, they would let us have but little to our ſhare. They eat Snails boil'd with Salt, and praiſe their Wholſomneſs. Fiſh of all ſorts, are lawful. In *Taffilet* and *Dra* moſt of their Food is Dates, there are ten or a dozen ſorts. They have good Capons all the Country over; no Turkeys, Ducks, nor Geeſe but wild, and thoſe they have of two ſorts; Duck, Teal, and Mallard, Corlews, Plovers, Snipes, Ox-birds, Pipers, a ſort of a black Crow, with

a bald Pate, and long crooked Bill, is good Meat, and a hundred other sort of Fowl. I have eat Antelope, which we have kill'd in hunting, and are very good Food. They are as large as a Goat, of a Chesnut Colour, and white under the Belly; their Horns are almost quite streight from their Head up, tapering gradually, with Rings at a distance from one another, till within an Inch and a half of the top; fine large black Eyes, long and slender Neck, Feet, Legs, and Body, shaped somewhat like a Deer; they have two Cavities between their Legs, I think the Male as well as the Female. I have sent of these Antelopes alive to *England*. There are many in a Herd, when at the same time they have Scouts, or those who by running give 'em notice of an approaching Foe. When two lie down together, they lay themselves so, that their Backs are towards each other, and the Head of one towards the Tail of the other, that they may see every way. Their Dung is sweet and pleasant enough. They are taken sometimes by the Hawk, sometimes by the Shot; for they are too swift for a Grey-hound. Partridges in *Sus* commonly roost on Trees; there are so many Foxes which would otherwise destroy them.

And here I should make mention of another Dish: The *Moors* will eat Fox, if it be Fat, either stewed or roasted, but they do not care for it lean, which has occasioned a Proverb among them on that Account, to wit, *Hellel deeb, harom deeb*; alluding to the Scruple might be made of its lawfulness. Those Words signifie, a Fox is lawful, and a Fox is unlawful; *i. e.* Fat, Lawful; Lean, Unlawful.

Fruits

B



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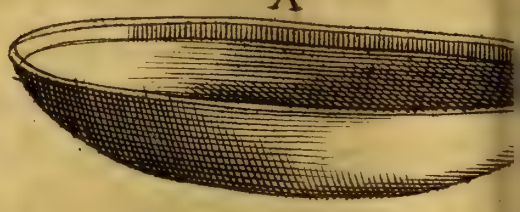

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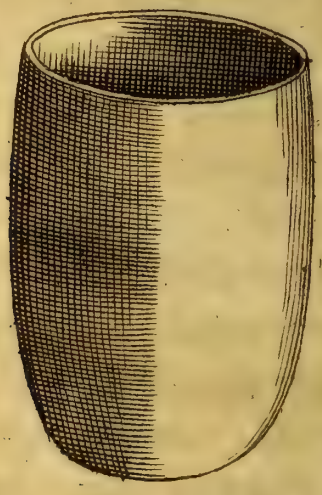

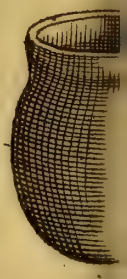

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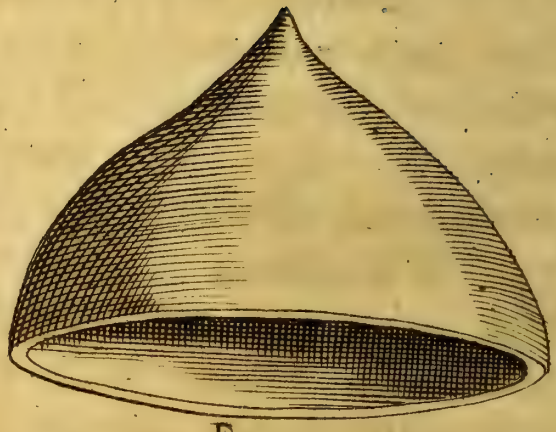

E

Fruits and Sweat-Meats they have of many kinds, as of three or four sorts of Pumpkins, Macaroons, Almonds prepared many ways, Raisins, Dates, Figs dry and green, excellent Melons of two or three sorts, and Water-Melons, Pomgranates of several kinds, Apples, Pears, Apricocks, Peaches, Mulberries white and black, Plumbs, and Damascens, Cherries, * Grapes of many kinds, and very good, and if they would assist Nature, they might have every thing in Perfection.

Lat. 30, or thereabouts. * Grapes in *Messia* I have known as big as a Pigeon's Egg; but they do not make Wine.

Their Salating is Lettuce, Endive, Carduus, Parsley, Apium, and other sweet Herbs, Onions, Cucumbers of several kinds, some about a Yard in length, and two or three Inches thick, and hairy, (this is esteemed the wholsomest) Radishes, *Fumatas*, or Apples of Love, all which they will cut, and put Oil, Vinegar, and Salt, with some red Pepper: This Salate they eat with Bread. They have a Fruit called *Baraneen*, in *Spain*, *Baragenas*; these they stew with their Victuals, and sometimes cut them in thin slices, and fry them; it makes a pretty Dish. When the *Moors* have feasted, every one washes his Hands and Mouth, thanks God, and blesses the Hosts and Entertainers from whom they had it; they talk a little, or tell some Story, and then lie down to rest, where I shall leave them at present, and do beg your Pardon for so tiresome and frivilous a Discourse.

A Letter from Mr. John Monro *to the Publisher, concerning the Catacombs of* Rome *and* Naples.

SIR,

THE Catacombs are an obscure Argument. I have seen those of *Rome*, I have seen those of *Naples*, and as they say there are Catacombs in the Neighbourhood of all the great Towns of that part of *Italy*, I had been glad to have seen them where-ever they are. They are an obscure argument indeed; but perhaps the greatest obscurity about them is, that a Matter that has so much exercis'd the Pens of the Moderns, shou'd be totally neglected by the Ancients: Neither the name nor the thing is found in the latter, whereas among the former, Antiquaries and Travellers are full of them. All they into whose way they come, think they do nothing if they do not exhaust them before they leave them; they take all their dimensions, and measure their height, their breadth and their length; they survey all the little Rooms, search every hole and corner, Criticize nicely on the quality, and calculate the Age of the poor Painting and Inscriptions, and make excursions into other Arguments, to find out the end for which they were

were made. The Catacombs are a narrow Gallery dug and carried a vast way under Ground, with an infinite number of others going off it on all hands, and an infinite number of little Rooms going off the Principal, and them too. Those commonly shew'd Strangers are those of *San Sebastiano*, those of *San Lorenzo*, those of *San Agnese*, and the others in the Fields a little off of *Sant Agnese*. They take their Names from the Churches in their Neighbourhood, and seem to divide the circumference of the City without the Walls between them, extending their Galleries every where under, and a vast way from it, so that all the Ground under, and for many Miles about it, is said to be hollow. Now there are two sorts of Authors that run into extravagance on this subject; the one will have them made by the Primitive Christians, adding, that in the times of Persecution they liv'd, held their Assembleis, and laid up the Bodies of their Martyrs and Confessors in them. This is the Account that prevails at *Rome*, and consequent to it there are Men kept constantly at Work in them. As soon as these Labourers discover a Repository, with any of the marks of a Saint about it, Intimation is given to the Cardinal Treasurer, who immediately sends Men of Probity and Reputation to the place, where they find a Palm painted or ingraven, or the Cypher XP, which is commonly read *pro Christo*, or a small round projection in the side of the Gallery, a little below the Repository; what is within it is carried to the Palace. Many of

these

these Projections we have seen open, with pieces of the Vials in them; the Glass indeed was tinctur'd, and 'tis pretended that in these Vials was conserved the Blood of the Martyrs, which was thus laid up nigh their Bodies, towards the Head, to distinguish them from those of the others that were not called to the Honour of laying down their Lives for the Faith of the Gospel. After the Labourers have survey'd a Gallery, they do up the entry that leads into it; thus most of them are shut; nor are more left open than what is necessary to keep up the Trade of shewing them to Strangers, which they say is done to prevent what has often happen'd, I mean Peoples losing themselves in these subterraneous Labyrinths; by this conduct depriving us of the means of knowing whither and how far they were carried. To this it may be justly excepted, that allowing the Catacombs to be proper for the end for which they are presum'd to be made, and that the Christians of that Age were in a capacity of making that convenience, for themselves to live and assemble in below Ground, at a time when 'twas so very unsafe to appear above it; yet to suppose that a work of that Vastness and Importance cou'd be carried on without the knowledge of the Government, is to suppose the Government asleep, and that that was actually done under its Nose, that must necessarily have alarm'd it, had it been attempted on the frontiers of the Empire.

The other sort of Authors give indeed a mighty Idea of the Catacombs, represent them

them as a work of that Vastness, that the Christians in the persecuting times had not number enough to carry it on; but then most unadvisedly with the same breath they confound them with the *Puticuli in Festus Pompeius*, where, at the same time that the Ancient *Romans* us'd to burn the Bodies of their dead, the custom was, to avoid expence, to throw those of the Slaves to rot.

This is not all, the *Roman* Christians, say they, observing at length the great veneration that certain Places gain'd by the presence of Relicts, resolv'd to provide a stock for themselves; entring therefore the Catacombs, they made in some of them what Cyphers, what Inscriptions, what Painting they thought fit, and then shut them up; intending to open them again upon a Dream, or some other important incident. The few that were in the secret of this Artifice either dying, or as the Monks, who were the only Men that seem to have had Heads adapted to a thought of this quality, were subject to so many removes, being transported to other Places, the contrivance came to be forgot, and those Galleries continu'd shut, till Chance, the Parent often of great discoveries, open'd them at last. Thus they conclude, the Remains of the vilest part of Mankind are trump'd up in the Church for the Bodies of the most eminent Confessors and Martyrs.

To leave the latter part of this Tale to shift for it self as well as it can, either the Catacombs are not that great work they are represented to be, nor to be found every where about the City, or 'twas very improper in

Festus

Festus Pompeius to call them by the little name of *Puticuli*, and so confine them to one place only, that I mean unknown now without the *Esquilin*-Gate. Indeed the Characters of the Places are so very unlike, that one wou'd wonder how a common Burying place, where in holes Bodies were thrown together to rot, came to be confounded with Repositories cut in the face of a long Gallery, one over another, sometimes to the number of seven, in which Bodies were singly laid, and handsomly done up again, so that nothing cou'd offend the view of those that went in, especially with the little Rooms of the fashion of Chappels, that have all the Appearances of being the Sepulchers of People of distinction.

The Remark, *Puticulos Antiquissimum sepulturæ genus appellatos, quod ibi in puteis sepirentur homines*, is that of an Etymologist, that would be now thought to speak against all the property of Language, if he apply'd the name to our Graves or Vaults, to which it may with more Justice and Reason be apply'd, than to the Galleries of the Catacombs, and the Rooms that go off them. What the particulars were is not difficult to define, after what we have seen so often. When the Persecutors spilt the Blood of so many Martyrs, they us'd to dig holes perpendicularly in the Ground, and to throw their Bodies promiscuously in them; of this the Memory is still conserv'd, Churches being built in the Places where the holes were made, and little Monuments erected over the holes themselves, to which the name of *Putei* is continued to this day.

This

This is the true notion of the *Puticuli*, holes dug perpendicularly in the Ground to throw Bodies indifferently and without any decency in; and according to the Argument this ought to be the conduct of the Ancient *Romans*, with Respect to their Slaves, as implying simplicity and the care to avoid a greater expence; but then what's all this to the Galleries and Chambers of the Catacombs, where decency and distinction of quality is nicely observ'd; and that, if they were look'd after, and kept in better repair, would be without dispute the noblest Burying-place this Day in the World? As often as they fall under my consideration, I cannot forbear thinking they were made for this end by the Ancient *Romans*, and made in consequence of these two Ancient opinions, that the shadows hate the light, and love to hover about the place where the Bodies are laid, they appear so easie and decent a resting-place for the one, without the least fear of being ever disturb'd, and at the same time there is provided a noble and a vast convenience full of variety for the others, to space themselves freely and with pleasure in.

I think 'twill not be denied, that laying up the Bodies in Caves was the original way of disposing of the dead; this was that of the *Phœnicians*, and as they were the Men that with their Colonies peopled the Western parts of the World, 'tis more than probable they carried it along with them whither soever they went. Afterwards, as Men grew great and powerful, they erected noble and magnificent Monuments for themselves above ground;

ground; at length others of inferiour degree imitated them, all leaving room enough and excluding the light: But then interring as we do now in the open Air, or in Temples, was never the manner till Christianity brought it in. Of the whole we have many Instances, and *Il Signior Abbate Bencini*, Bibliothecary of the *Propaganda*, a Gentleman of good Ancient Learning, assured me in the conversation I had with him on this Argument, that on the great Roads in most parts of *Italy* little Catacombs have been and are still found under ground, and that 'twas the Custom to build little Houses over them. This, and the testimony of the Labourers whom I consulted on the matter, made me abandon an opinion of which I was once fond, that the Catacombs are of the Nature of our Gravel-pits, as old as the City itself, and yet out of them was taken the *Puzzolana*, the famous Ingredient in the *Roman* Mortar. The same learned Gentleman added, relating to the marks of a Martyr, that they don't conclude much; that the so fam'd Cypher XP was in use among the Ancients long before Christianity begun: And when I ask'd him what the meaning of it might be among them? return'd, that 'twas compos'd of the two *Greek* Letters X P, under which something mystical was comprehended, but that he met with no Author that gave account what the mystery was.

Thus, after a multitude of thoughts about the Catacombs, I'm forced to take up with this; so natural it is, arising from the sole Theory of the Place, and falls in so oppositely

with

with the Religion and Practice of the Ancients, among whom the *Dii Manes* were the Tutelary Gods of the Country, and *D. M.* at the head of an Inscription, argues the Moles, the Sepulchre, the Monument, *&c.* was in the primary intention made for and dedicated to the Soul. Upon the same Maxims, in Foreign expeditions, when a Hero died or was kill'd, as the Body was liable to a quick corruption, and for that Reason unfit to be transported entire, they fell on the expedient of Burning, in order to bring home the Ashes, to oblige the *Manes* to follow, that so the Country might not be deprived of the Benefit of its tutelage. This I humbly conceive was the Original of Burning, which by Degrees became more and more universal, till at last the Pomp and Magnificence of it reconcil'd it to all that were able to go to the length of the expence.

As for the prejudice of the Silence of the Ancient Authors in this matter, 'tis easily removed, and to be regreted at the same time that the Authors of all Ages, too much neglect the customs of their own time. Writing for the satisfaction of their Cotemporaries, they think it impertinent to Trouble them with the Account of what they see Transacted every Day. By this means the Ancient Customs, with the Time, and Reasons of their disuse, are lost with Respect to us, and ours with the same Circumstances may come to be so with relation to Posterity. As the Authors are pleas'd to adopt them for their Children, one wou'd wonder greater care is not taken not to entail visible occasions of

complaint on them; nay, one wou'd wonder more, to see these Gentleman so little ambitious of a future reputation, when they may infallibly assure it themselves, without resigning the present, by transmitting the knowledge of things, the knowledge of which may in a small series of Years become otherwise irretrievable; they cannot but observe every Day what esteem is placed on those Authors, to whom we are forced to go, to find in them what cannot be found elsewhere, to compare with the others, in whom nothing is to be found, but what Men of Reason are able to find at home.

Upon the whole, the Catacombs I humbly conceive were the Burying-places of the Ancient *Romans*; at length the manner of Burning, which they received from the *Græcians*, coming by degrees to prevail universally, they fell under a total neglect. This is the State in which the Primitive Christians must be suppos'd to have found them; 'tis not to be imagin'd they could have made any use of them, at a time when 'twas the daily practice to lay up even the depositions of the Slaves in them; so that either the Christians made no use of them at all, or they never were the burying Place of the Slaves. Now as these are Suppositions that naturally destroy one another, one would count it more safe to follow the faint light of a glimering tradition, than abandon ones self to the Conduct of an *Ignis fatuus*, that for ought a Man knows is actually misleading him, so I beg leave to call the Testimony of *Festus Pompeius*, that may rather be apply'd to any other thing than

than to the Galleries of the Catacombs, carry'd under ground, they ſay 20 Miles from the City in ſome places, and no Body knows how far in others, and to that vaſt number of Chambers that go off them. Thus therefore the Chriſtians finding them in a ſtate of neglect laid up the Bodies of their Dead in them; and perhaps when the Perſecution was hot, conceal'd themſelves and kept little ſeparate Aſſemblies in their Chambers. At laſt the Empire turning Chriſtians, they fell again in the old ſtate of neglect, in which they continu'd till upon the reading of I have forgot what Author that makes mention of them, they came to be look'd into and ſearch'd. What I have writ relates to the Catacombs of *Rome*, thoſe of *Naples* are a quite other thing, of which *per* next. I am,

Sir,

Your moſt humble Servant,

Marſeilles, Aug. 22. 1700. J. Monro.

An accurate Deſcription of the Lake of Geneva, *not long ſince made by a Perſon that had viſited it divers times in the pleaſanteſt ſeaſon of the Year; and communicated to the Publiſher by one of his Pariſian Correſpondents: Engliſh'd as followeth.*

YOU have reaſon, *Sir*, to demand of me an Account of the *Lake of Geneva*, which, in my opinion, about this Seaſon of the Year (in *June*) is one of the moſt pleaſant Places of the World. This is the Third time I have viſited it, and I am, if I may ſay ſo, more charmed with it than the firſt.

I ſhall ſay nothing of the *Alpes*, nor of mount *Jura*, which do environ it, which by this Lake as by a large Ditch, are ſeparated from one another: For that would not give you a ſufficiently fair *Idea* of the Country. Be pleaſed therefore to repreſent unto your ſelf a Croiſſant of Water, one extremity whereof is Eighteen Leagues diſtant from the other, and the Banks of which are gently raiſed to ſome heights, then to collines, and at length to ſtupendious Mountains; which yet are not ſo linked to one another but that

that they leave betwixt them interſtices of Fifteen or Twenty Leagues proſpects, checkered by Meadows, Corn-Fields, Orchards, Vines, Forreſts of Fir-Trees, Snow lying on the ſides of the Rocks. All theſe Objects, which at a diſtance are confounded, and ſeem to make but one, have near hand their ſeveral Beauties: So well is the Country interſected by Rivolets, which, after they have ſerved to make Iron, Paper, &c; run into the Lake, carrying with them very many Fountains.

But leaving theſe Things, I ſhall now content my ſelf to entertain your Curioſity by giving you a candid Relation of what I have there obſerved in the ſpace of Four Months.

Although I have told you, that this Lake hath the figure of a *Croiſſant*, yet that point, where is *Geneva*, is ſomewhat longer and more extended than the other. This Croiſſant where 'tis largeſt, which is from *Morges* to *Thonon*, is about Five good Leagues over. That which hinders from making an exact eſtimate of its Largeneſs in other places, is, that the Winds by driving the Water toward the Banks have made certain points, which advance far into the Lake, in ſuch ſort that when one happens to be oppoſite to the other, the Lake ſeems to be narrow: As may be obſerved in going from *Geneva* to *Nion*, where it ſeems as if the *Pharus* or watch Tower of *Prangin*, which is in *Suiſſe*, did almoſt touch *Savoy*; whereas yet one is a League diſtant from the other. And, what is remarkable, is, that at the coming out of

this Streight, the Lake hath there almoſt its greateſt breadth and depth.

The Water of this Lake is very good to drink, and ever ſo limpid, that even in the roling of the Waves, which ſometimes go high enough, the Water is not troubled but along theBanks. And if one do attentively look down from the Caſtle of *Chilon* or from any of the neighbouring heights into the bottom of the Lake, he may ſee high Mountains under the Water. And the Water is ſo Deep before *Veuvay*, that the ſounding Line at the end of four hundred Fathoms ſeems, becauſe it will not ſtay, to Touch upon ſomething ſlippery. 'Tis held to be 500 Fathoms deep before *Roole*; and 'tis affirm'd, that near this great Depth there may be ſeen a kind of *Iſle* under Water.

The *Rhone* enters at one of the Points of the Croiſſant into the Lake, and iſſueth out at the other; but with this Difference, that whereas he comes in Dirty and Miry, he ever goes out ſo Pure and Clear, that under the Bridge of *Geneva*, where the Water is deep twenty five Feet in Summer, you may well diſcern the ſmalleſt Stones at the bottom. And the ſame Water, which in this Place appears of a Saphyring Blew in the ſhade of the Houſes, appears altogether Green, nor is ſo Tranſparent, when the Sun ſhines on it.

There is a great diverſity of Opinions as to the *Current* of the *Rhone* in the Lake; ſome maintaining, that *it* may be diſcerned, others denying it. Having heard the Sentiments of the Curious of *Lauſanne* and *Geneva*, and the Opinions of the moſt knowing Fiſher-

men

men that are there in great Number, and especially at *Coupet*, I believe with the latter; that, although the *Rhone* entring into the Lake loseth its Violence, yet doth he still keep some sensible Motion in some places, and every were observable, and that no Trouts are taken any were in this Lake, but in this Current of the *Rhone*; which is what these Fishermen call, to go and Fish *sur le mont*.

Others there are, that go further and say, that one may every where distinguish the Water of the Lake from that of the *Rhone*: But the Fishermen will not allow this, but assert, that there is no other Mark than those lately alledged, *viz.* of the Trouts, and the Current; and that the latter of these is alone sufficient, in calm Weather, to observe the Current of the *Rhone* from the place of his entring the Lake unto that of his going out.

The Water of this Lake commonly begins to Increase about the end of *January*, or the beginning of *February*, and continues to do so unto the twentieth of *July*, and often unto the very Month of *August*; and then it insensibly decreaseth, so that the Water is less high in Winter than Summer by twelve or fifteen Feet; the Frosts draining the Springs, or rather Freezing the Waters that issue out of them.

About this Increase of the Water there are also different Opinions. 'Tis true, they all believe in general, that the principal cause of the Increase of the Water is the melting of the Snow, and of the Mountanous Ice, that is in the Winter form'd of

the Waters of the Springs and Torrents, which the Frost fixeth. This is so true, that when there is much Snow in Winter, the Waters are very high the ensuing Summer. But when great Rains chance to fall in *January*, then the Snow, not yet being well hardned, melteth on a sudden altogether. And when this melting is not so violent, all the Snow that will melt, melts at the end of *May* or at the beginning of *June*; so that, there remaining but the stock of Ice for entertaining the Increase of the Water unto the Month of *August*, some have thence been induced to say, that this Increase, which amounts, as has been said, to 15 Feet Water generally all over the Lake, is caused by the Herbs, growing, as they pretend, at its bottom in great abundance; and that these Herbs, whilst growing, do force the Water upwards, and dying in Autumn make the Water to sink lower. Which is not satisfactory to me, because there are no Herbs seen upon the Lake, and very little within it, and the Banks being very dry.

Others there are, that will have this Water rarified by the Heat of the Sun, and thereupon swell'd on the Borders, hot Water not being so high in the middle as cold.

This is certain, that all the Rivers and Torrents, that fall into this Lake, carry with them store of Stones and Earth, which may indeed enlarge and raise it: But such an aurmentation or rise cannot be sensible but from Age to Age; not to mention, that in Winter, whilst the Water is low, the Stones of the Lakes are carried away for building or fortifying at *Geneva*.

At the iſſuing out of the Barres, that form *Geneva*, on the ſide of the Lake, are ſeen in the Water two or three huge Flints, ſtanding out of the Water; the chief of which they call *Niton*: And the Tradition is, that it formerly was an Altar conſecrated to *Neptune*; there being alſo a place cut out in the middle, which they take to have been the place for the Sacrifice. On this Flint ſeven or eight Perſons can ſit; and ſometimes, when the Waters are very low, there are found about it Knives, and Needles as thick as Bodkins of tweeſes, and much longer; both of Braſs, well enough made, and eſteemed to have ſerved for the Sacrifices.

This Lake in ſerene and calm Weather appears ſometimes, and that even before Sunriſing, as if it were made of divers pieces, differently coloured; part of it being Browner than the reſt, which ſeems to be cauſed by a Breath of Wind paſſing thorough the Water, coming either from the bottom of the Lake, or from above; tho' others think this gentle agitation to proceed from ſome Springs that are at the bottom, making the Water ſhiver above. But that part of the Water, that is not moved, appears as even and ſmooth as a Looking-Glaſs, or like Water traced by a Ship. And as for the Colours, they are, in my Opinion, an effect of the neighbouring Mountains, the different Images of which, being confounded in the Water, make an appearance of very pale Colours.

After that the *Rhone* is entred into the Lake, he retakes not his impetuous courſe before a quarter of a Mile's diſtance from its

coming

coming forth again, that is, above *Geneva*. And the nearer he comes to that Town, the more his Bed becomes narrow, and conſequently his courſe more Rapid. Yet this Rapidneſs hath been in our times once ſurmounted by Wind, and once by Water. To underſtand which, you may imagine, that in *Geneva* there is a ſtreak of Land about an hundred Fathoms long, which divides the *Rhone* into two parts, paſſing under four Bridges, then covered with Houſes. From the Point of this Iſle unto ſeveral ranks of Stakes on that ſide of the Town, there are about a Thouſand common Paces. This whole ſpace of Water, which makes the figure of an V (whereof the Iſle is the Point, and the Town forms the ſides, and the Stakes the empty place of the end) hath been once laid dry by a violent Wind, aftet this manner. One Day in the Winter of the Year 1645. there aroſe in the Morning about 9 a clock ſo furious a Wind, that not only it uncovered the Houſes, but alſo laid dry the Bed of the *Rhone* above the Bridges, ſo that many, in the view of all the Town croſſed quite over it dry-foot, and one of the Sons of M. *D. Aubigny* took up ſome Medals, which he found in his way. This paſſage was free during an Hours time; at the end of which the Rivers retook its courſe. At that Seaſon the Water being very low, and a Weſt-Wind, to arrive at *Geneva*, being preſſed by the high Mountains that bring it upon the Town as by the noſe of a pair of Bellows; it came to paſs, that that Wind did violently bear upon the Water near the ſaid

Bars

Bars keeping suspended the Water that was beyond, and those Waters, that were beneath, running away downwards by a declivity, and under the shelter of the Houses. Whilst I was scrupling at this Relation, they brought me *Gallasius* his Commentary upon *Exodus*, Printed 1560. where 'tis recorded, that the like accident had faln out at *Geneva* at the time when that Minister lived there, a South West Wind having made the *Rhone* to recoile into the Lake, and many People having thereupon passed over dry for an Hours time.

Concerning the other Accident; you may remember, that the River *Arve*, which is a kind of Torrent falls into the *Rhone*, about a 1000 Paces beneath *Geneva*. In the Month of *December* in the Year 2652. the said *Arve* did so extraordinarily swell, that not only it over-run its Banks with impetuosity, but also interrupted the course of the *Rhone*, and forc'd it to re-enter into the Lake for the space of fourteen hours; though some do esteem, that the *Arve* dis-gorged it self for that time into the Lake, by passing *over* the Water of the *Rhone*, which, in their Opinion, continued his course under the Water of the *Arve*. However the Water was seen at *Geneva* to re-enter into the Lake.

But to conclude, this Lake doth very much abound in Fish; but that which is observable is, that those Fishes have as 'twere cantonized themselves, and divided the Lake among them. The *Trouts* are not to be found there, but, as hath been already mentioned, in the Current of the *Rhone*: The *Carps* have taken

ken up their quarter towards *Veuvay*: The *Pikes* and *Pearches* have alſo their Habitations apart. But ſome other Fiſh, that are but Paſſengers, not living conſtantly in the Lake, ſpread themſelves almoſt every where indifferently.

The great Trouts paſs out of the Lake for four Months of the Summer, and are taken in Autumn when they are returning thither. The Fiſhing is farmed out at *Geneva*; and there are Conſervatories where many of thoſe big Trouts are kept, among which there are ſome that weigh fifty pounds. Sometimes they catch Pikes there of eighty pounds weight; and a pound weight at *Geneva* you know to be eighteen Ounces.

In the Months of *July* and *Auguſt* they fiſh there for the Fry of Pearches, at a time when they are no bigger than the ſmalleſt Taggs. Theſe are a very delicious Diſh, there called *Mille Cantons*.

I ſhall add no more than put you in mind of that Duke of *Savoy*, who renounced his Crown and the Pontificat it ſelf, to paſs deliciouſly the reſt of his Days at *Ripialles*, where he made ſo good cheer to all that viſited him, that to expreſs a very merry Entertainment, they ſay ſtill, *faire Ripialles*.

Part of a Journal kept from Scotland *to* New Caledonia *in* Darien, *with a ſhort Account of that Country. Communicated by* Dr. Wallace, *F. R. S.*

September 2. we weighed at *Maderas*, and were under the Tropic of *Cancer* by the 10th of the Month, at which time the uſual Ceremony of Ducking from the Yards-arm was performed on thoſe that could not pay their Tropick Bottle. All this time we had a brisk and conſtant Trade-wind, which laſted three days more, but afterwards we had it more variable than is uſual in that place of the Sea.

The 28th we made *Deſeada*, a ſmall high Iſland, about a league in length and as much in breadth; it is full of Trees, but whether it affords Water or not I know not. It is uninhabited. Next morning we were betwixt *Antego* and *Montſerat*, belonging to the *Engliſh*, both pretty large and mountainous. *Antego* is Peopled with *Engliſh* for the moſt part, and *Montſerat* by a mixture of *Engliſh* and *Iriſh*. Their Product is Sugar and Tobacco. We were in the afternoon cloſe by *Redonda*, a ſmall Rock about a mile long, inhabited only by Noddies and Boobies. When we were ſome leagues from *Redonda*,

we

we saw at the same time *Antego*, *Montserat*, *Redonda*, *Nevis*, *St. Christophers*, and *Statia*. We sailed close by *Nevis*, it bearing North of us; it is a small well Peopled Island, its Product is Sugar. They twisted the Flag at the Harbour, and we shew'd them the Company's Colours. *St. Christophers* is a large Island, ill Peopled, belongs half to the *English*, half to the *French*. Night parted us from these Islands, and next day, which was the 30th, we came in sight of *Santa Cruz*, belonging to the *Spaniards*. When we were within four leagues they held a Council. The *Unicorn* and *Snow* were sent to St. *Thomas*, a small Island belonging to the *Danes*; it is a free Port, and they say is well fortified. We went on to the Southward of the Island, and next Day, being *October* 1. we were about 12 a clock past the S. W. corner. It is very level towards the South. That Night we got a sight of *Crab Island*, and next Day

October 2. we came into it, and sent some of our People ashore, and took possession of it in the Companies name. *October* the 4th we stood to the Leeward, hearing there was a Harbour there; when we came we saw the *Danes* Colours flying on the Shore, for the Governour of St. *Thomas* had sent 14 Men and a Captain to take possession of it in the King of *Denmark*'s name. Our Councellors sent to know his Business there, and he told them this, but we found that we had taken possession of the Place before they came from St. *Thomas*. They gave in their Protest, yet seem'd to be glad enough of our Neighbourhood. We had notwithstanding our Flag upon

upon the Shore all the while we ſtay'd, with 100 Men, and Captain *Melean* Governour; they ſtayed till we were gone, but would certainly March next Day, otherwiſe the *Spaniards* of *Porto Rico* would not miſs to take them off.

The 6th, Captain *Pinkerton* and the *Snow* came in from St. *Thomas*, with old Captain *Aliſon* along with them for a Pilot. On the 8th we left this place, and on the 17th made *Noſtra Signiora della Popa*, we lay aſide there along the Coaſt, until the 3d Day of *November*, generally loſing by Night what we had gain'd all Day.

Crab Iſland is about 6 Leagues long, and in ſome places 5 broad, the Soil is very good. It's all full of Trees; all the South ſide is full of Bays, very fit for anchoring in, but the beſt of all is to the Leeward, where the *Dane* hoiſed his Colours. It would have been worth our while to poſſeſs it, had we not been a coming to a better Country. It has this Inconvenience, that nothing but ſtrength of Men, or Peace with every Body, can render it ſecure. It is called *Crab Iſland*, from the multitude of Land-Crabs there.

November 3. We anchored before *Golden Iſland*, and ſent in our Pinnace to the Bay. The Natives had hoiſed a White Flag in ſign of Peace, and told us a great many Stories of Captain *Swan*, Captain *Davies*, and others, for they took us for *Engliſh*, by reaſon of our red Fly; but we took no notice of the Men they nam'd. At laſt they ask'd us our Buſineſs? we told them we deſigned to ſettle among them, and to be their Friends.

They

They told us we were very welcome, and that by prediction they had expected us these two Years; for they say that two Years ago it was foretold them that a People should come and live among them, that would treat them civily, and teach them good manners. We conversed some time with them, and after viewing the Harbour came aboard.

The 4th we came into the great Harbour of *Caledonia*: It is a most excellent one, for it is about a League in length from N. W. to S. E. It is about half a Mile broad at the Mouth, and in some places a Mile and more farther in. It is large enough to contain 500 sail of Ships. The greatest part of it is Land-lock'd, so that it is safe, and cannot be toucht by any Wind that can blow the Harbour, and the Sea makes the Land that lies betwixt them a Peninsula. There is a Point of the Peninsula at the Mouth of the Harbour, that may be fortified against a Navy. This Point secures the Harbour, so that no Ship can enter but must be within reach of their Guns. It likewise defends half of the Peninsula, for no Guns from the other side of the Harbour can touch it, and no Ship carrying Guns dare enter for the Breast-work at the Point. The other side of the Peninsula is either a Precipice, or defended against Ships by Shoals and Breaches, so that there remains only the narrow Neck that is not naturally fortify'd; and if 30 Leagues of a Wilderness will not do that, it may be artificially fortified 20 ways. In short, it may be made impregnable, and there is Bounds enough within it, if it were all cultivated, to afford 10000 Hogsheads of Sugar

every

every Year. The Soil is rich, the Air good and temperate, the Water is sweet, and every thing contributes to make it healthful and convenient. The Product of this Place, I mean in the Harbour and Creeks hereabouts, is Turtle, Manatee, and a vast variety of very good small Fish, from the bigness of a Salmon to that of a Perch. The Land affords Monkeys of different sorts, Wild-Deer, *Indian* Rabbit, Wild Hog, Parrots of many kinds, Parakites, Macaws, Pelicans, and a hundred more Birds we have got no name to. There are moreover Land-Crabs, Souldiers, Land-Turtle, Lizards, Guanha's, Cock-Lizards, and Scorpions: I had almost forgot Partridges, Pheasants, and a kind of Turkey. All the Birds in this Country are beautiful, but none of them that I could observe have any Notes. We have a Monkey aboard that chirms like a Lark, it will never be bigger than a Rat. This Place affords legions of monstrous Plants, enough to confound all the Methods of Botany ever hitherto thought upon. However, I found a shift to make some Specimens, and that is all I can do. I say some Specimens, because if I should gather all, 'twould be enough to load the St. *Andrew*, for some of their Leaves exceed three Ells in length, and are very broad; besides these Monsters, reducible to no Tribe, there are here a great many of the *European* kindred, (but still something odd about them) as *Lingua Cervina* of different kinds, *Filix* of different kinds, *Polypodium*, several of the *Plantæ Papilonaceæ*, *Musci*, *Fungi*, *Convolvuli*, and a great many more I cannot now remember.

Now come we to their People. The Men are generally very Civil and Sagacious, have all of them good Faces, are of low stature, but very well built; they are of a Copper Colour, and have black Hair; they us'd to go naked, but are now as well Cloath'd as our selves; they wear a Plate of Gold in their Nose, and a great many rows of Beads about their Neck and Wrists. They cover their Yard with a piece of Bark, or sometimes Silver, of the very shape and bigness of that Paper-case we use to put a dose of Pills in; they seem to be very ill furnish'd, for I never saw any of them have it half an Inch long, yet no doubt it's longer, but I fancy they sheath it up, as Dogs and Horses do. The Women are generally the most pitiful like things that ever Man saw; their Habit differs from the Men, for they ordinarily wear a Ring in their Nose; they have Petticoats and a Veil over their Face. They are under no formal Government, but every Captain commands his own River, Bay or Island, where he lives; the greatest of them all is one Captain *Ambrosio*, he commands particularly the Country about the *Samballoes* Point, but when he pleases he can Levy all the Men betwixt that and the Gulf about 20 Leagues. There is another Captain *Pedro*, that lives in the House with *Ambrosio*, and is his Nephew and Son in Law; there is a 3d Captain *Andreas* that commands the River *Das armas*; a 4th Captain *Brandy*, that commands about the *Golden Island*; a 5th Captain *Andreas*, that commands the Country adjoining to our Settlement; and a 6th Captain

Pedro

Pedro his Conſort; a 7th Captain *Pacigo*, who commands at *Carret Bay*, and Captain *Diego* that commands the Gulph. *Ambroſio* ſeems to be the greateſt, and *Diego* next, both old Men; they are all very much our Friends, and fond of us. All have been frequently here except Captain *Diego* who is Goutyiſh. Some of theſe Captains wear the *Scots* Flag in their Canoa's. There is no ſuch thing as a King or Emperor of *Darien*, nor, ſo far as we can gather from all the chief Men hereabout, has been theſe 40 or 50 Years: The old Men remember ſuch a Man, they ſay he was a Tyrant, would take as many Wives as he pleaſed, and allow them but one, and therefore they cut him off. This derogates much from the reputation of the *Hiſtory of the Buccaneers*. If there were ſuch a Man, he has been an *Indian* made Emperor by themſelves, I mean by the *Buccaneers*. This Country certainly affords Gold enough, for beſides that the Natives conſtantly aſſure us, that they know ſeveral Gold Mines on this ſide; beſides that, I ſay, the Plates they wear in their Noſes, and the quantity of Gold that is among them, is enough to perſwade any Man of the truth of it. There was one Night aboard here ſome *Indians* that had a hundred Ounces of Gold about them. We are certainly much bound to Providence in this affair; for as we were ſearching for the place we were directed to, we found this, and though the Privateers had been ſo often at *Golden Iſland*, and though *Engliſh*, *Dutch* and *French* had been all over this Coaſt, from *Portobelo* to *Cartegena*, yet

never one of of them made the discovery; even the *Spaniards* themselves never knew of this place. Besides, for as great a secret as we thought the Project, it was known all the *West Indies* over, and yet it was not in their power to crush it. At *Madera* they seem'd to know it, at St. *Thomas* I'm sure they knew it; at *Portobelo* their Intelligence was so good, that they knew the names of all our Councellors and Captains of Ships before we landed, and had that particular observation, that there were four *Roberts* among them. Our circumstances are in some Respects very good, for we have advice by the way of *Portobelo*, that there is a great Rebellion in *Mexico*, and Captain *Diego* and all the *Indians* about him are at present at War with the *Spaniards*. Captain *Ambrosio* is going to his assistance, and that will divert them on that side; but which is better than all, that we are now in a posture of defence against all the *Spanish* force in *America*. I have seen already *Dutch*, *French*, and *English* all at the same time in our Harbour, and all of them wonder what the rest of the World have been thinking on, when we came hither to the best Harbour of *America*, in the best place of it. Captain *Long* came in eight days after, and I believe we were a great Eye-sore to him, tho' he said nothing. He commanded the *Rupert Prize*, a small *English* Man of War, fitted out by the King, upon what design we know not, but he pretends it was to search for a Silver Wreck; he was on this coast a Month before sounding it; and conversing with the Natives, he put ashore Men in some

places

places, to take poſſeſſion for the King of *Great Britain*, but none of them within 15 Leagues of us. Hearing by the Natives that we were here, he came in with his Long-Boat, as he ſaid to ſee us, but I believe it was only to know the certainty of what he feared was too true. He had told all the *Indian* Captains that he came only to try their inclinations, and that there was a great Fleet coming with a great many People to ſettle among them, and defend them againſt their enemies, he meant *Engliſh* that were to come by his direction; but our Fleet coming within a Month after, they all lookt upon us to be the People he ſpoke of; ſo that whatever Preſents he made them before that time, was as much for our Advantage as if our ſelves had given them. He pretends to be a Conjurer, and to foretel things; but that was the trueſt Prophecy ever he ſpoke, though he knew not whom he ſpoke of.

A DISCOURSE tending to prove at what Time *and* Place, Julius Cesar *made his first Descent upon* Britain: *Read before the* Royal Society *by* E. Halley.

THough *Chronological* and *Historical* Matters, may not seem so properly the Subject of these Tracts, yet there having, in one of the late Meetings of the *Royal Society*, been some Discourse about the Place where *Julius Cesar* Landed in *Britain*, and it having been required of me to shew the Reason why I concluded it to have been in the *Downs*; in doing thereof, I have had the good Fortune so far to please those worthy Patrons of Learning I have the Honour to serve, that they thought fit to command it to be inserted in the *Philosophical Transactions*, as an instance of the great Use of *Astronomical Computation* for fixing and ascertaining the Times of memorable Actions, when omitted or not duly delivered by the Historian.

1. The Authors that mention this Expedition with any Circumstances, are *Cæsar* in his *Commentaries lib.* 4, and *Dion Cassius* in *lib.* 39; *Livy*'s account being lost, in whose 105*th*, Book might possibly have been found the Story

Story mare at large. It is certain that this Expedition of *Cæsars*, was in the Year of the *Consulate* of *Pompey* and *Crassus*, which was in the Year of *Rome* 699. or the 55*th* before the usual Æra of Christ: And as to the time of the Year, *Cæsar* says that *Exigua parte æstatis reliqua*, he came over only with two Legions, *viz.* the 7*th* and 10*th* and all Foot, in about 80 Sail of Merchant Ships, 18 Sail that were ordered to carry the Horse not being able to get out at the same time from another Port, where they lay Wind-bound. He says that he arrived about the 4th hour of the Day, *viz.* between Nine and Ten in the Morning, on the Coast of *Britain*, where he found the Enemy drawn up on the *Cliffs* ready to repel him, which place he thus describes. *Loci hæc erat natura, adeo montibus augustis mare continebatur ut ex locis superioribus in littus telum adjicit possit*, by which the *Cliffs* of *Dover* and the *South Foreland* are justly described, and could be no other Land, being he says in the 5*th* Book of his Commentaries, *in Britanniam trajectum esse cognoverit circitur millium passum triginta à continenti*, the *Cliffs* of the *North-Foreland* being at a much greater distance. Here he says he came to an Anchor, and staid till the 9*th* hour, or till about between Three and Four in the Afternoon, expecting till his whole Fleet was come up; and in the mean time called a Council of War, and advertised his Officers, after what manner they were to make their Descent, particularly in relation to the Suff of the Sea, whose motion he calls *celerem atq; instabilem*, quick and uneven. Then, *viz.* about

Three in the Afternoon he weighed Anchor, and having gotten the *Wind* and *Tide* with him, he Sail'd about Eight Miles from the first place, and Anchor'd against an open and plain Shore.

2. Here he made his Descent, and having told us the opposition that was made, and the means he used to get on Shore, he comes to say, that after he had been *Four Days* in *Britain*, the 18 Ships with his Horse put to Sea, and were come in sight of his Camp, when a suddain Tempest arose, with contrary Wind, so that some of the Ships put back again, others were driven to the Westwards, not without great danger, and coming to Anchor, they found they could not ride it out: so when Night came on, they put off to Sea and returned from whence they came. *That same Night* it was *Full-Moon*, which makes the greatest Tides in the Ocean, and they being ignorant thereof, their Gallies, which were drawn on Shore, were filled by the Tide, *&c.*

3. Then he says that the Day of the Autumnal Equinox being at hand, after some Days stay, wherein there passed no Action because he kept close in his Camp by the shore; and not thinking it proper to stay till the Winter came on, he returned into *Gallia*: The next Year he made a further Expedition with 5 Legions and a good Body of Horse, but there is but little in the History thereof serving to our purpose, excepting that he says he set Sail from the *Portus Icius* about Sun Set, with a gentle S. W. Wind, *leni Africo profectus*; that about Midnight it fell Calm,

and

and being carried away with the Tide, by the time it was Day, he found he had left *Britain* on the left hand; but then the Tide turning they fell to their Oars, and by Noon reached that part of the Island where he Landed before, and came on Shore without opposition: and then March'd up into the Country, leaving his Ships at Anchor *in littora molli & aperto.*

4. This is all in *Cæsar* that is any thing pertinent, and I find no where else any thing to guide us farther, except one passage in *Dion Cassius*, who speaking of the first Landing of *Cæsar*, says ἐμβύτοι γὴ ἡ ἔδῳ προσέχειν, that is, as I Translate it. But he Landed not where he intended, for that the *Britains* hearing of his coming, had possest all usual Places of Landing Ἀλλαχοῦ τινὰ προέχειν περιπλεύσας ἐτέρωσε παρενομίθη. Καὶ ταῦθα τὸς προσμίξαντας οἱ ἐς τὰ τενάγη ἀποβαίνοντι νικήσας, ἔφθη τ γῆς κρατήσας, in my English. Wherefore doubling a certain head Land, he made to the Shore on the other side, where he overcame those that Skirmished with him at the Waters edg, and so got well on Land. Here I make bold to translate the Words ἐς τὰ τενάγη, *at the water edge*, which in *H. Stephens* Edition is interpreted *in paludibus*, but I have the Authority of *Suidas*, who says τέναγος, πελαγία ἰλὺς, or the Sea Mud, and is therefore properly the Ouse on the Sea Shore, and by an easie Figure may be put for the Shore it self, where such Ouse commonly is found.

5. From these *data*, That it was in the Year of the *Consulate* of *Pompey*, and *Crassus*; That it was *Exigua parte æstatis reliqua*, and

Four

Four Days before a Full-Moon, which fell out in the Night time. The time of this Invasion will be determined to a Day: For by the Eclipse of the Moon, whereof *Drusus* made so good use to quiet a Mutiny in the *Pannonian* Army, upon the News of the Death of *Augustus*, it follows that *Augustus* Died *Anno Christi* 14. which was reckoned *Anno Urbis conditæ* 767. and that this Action was 68 Years before, *viz.* in the 55*th* Year before Christ Current. In which Year the Full Moon fell out *August* 30. after Midnight, or 31 in the Morning before Day; and the preceeding Full-Moon, was *August* 1. soon after Noon; so that this could not be the Full-Moon mentioned, as falling in the Day time: nor that in the beginning of *July*, it being not 10 Days after the Summer solstice, when it would not have been said *exigua parte æstatis reliqua.* It follows therefore that the Full-Moon spoken of, was on *August* 30. at Night, and that the Landing on *Britain* was *August* 26. in the Afternoon, about a Month before the Autumnal equinox; which agrees to all the Circumstances of the Story in point of Time.

6. As to the Place, the high Land and Cliffs described, could be no other than those of *Dover*, and are allowed to have been so by all, it remains only to examine whether the Descent was made to the Northward or Southward of the place where he first Anchored. The *data* to determine this are first that it was Four Days before the Full-Moon. 2. That that Day by Three of the Clock in the Afternoon the Tide ran the same way he

Sail'd.

Sail'd. 3*dly*. That a S. by E. Moon makes High-Water on all that Coast, the Flood coming from the Southward: hence it will follow, that that Day it was High-Water there about Eight in the Morning, and consequently Low-Water about Two, wherefore by Three the Tide of Flood was well made up, and it is plain that *Cæsar* went with it, and the Flood setting to the North-ward shews that the open plain Shore where he Landed was to the Northward of the Cliffs, and must be in the *Downs*; and this I take to be little less than Demonstration. A second Argument is drawn from the Wind wherewith he set out on his second Expedition, *viz.* S. W. as appears by the Words *leni Africo profectus*, with which the Navigation of those times would hardly permit a Ship to Sail nearer the Wind than Eight Points, or a N. W. Course; which would serve indeed to go into the *Downs*, but would by no means fetch the Low-land towards *Dengyness*, which is much about West from *Calais*, and not more than W. N. W. from *Boulogne*, if it shall be said that that was the *Portus Icius* from which *Cæsar* set out. Whence I take it to be evident that if *Cæsar* was not bound more Northerly than the *South-Foreland*, he could not have thought the *Africus* or S.W. Wind proper for his passage, which was then intended for the place where he first Landed the year before.

7. Justly to determine which the *Portus Icius* was I find no where sufficient grounds; only *Ptolemy* calls the Promontory of *Calais-Cliffs* by the name of Ἰκιον ἄκρον, whence there is reason to conjecture, that the *Portus Icius* was very

very near thereto, and that it was either *Ambletuse* on one side, or *Calais* on the other. The same *Ptolemy* places Γισοῤῥίακον ὄπνευον in the same Latitude with the Ἴκιον ἄκρον, but something more to the East, which seems to refute those that have supposed the Ancient Port of *Gessoriacum* to have been *Boulogne*, whereas by *Ptolemy*'s position, it must be either *Dunkirk* or *Graveling*, but the former most likely, both by the distance from the Ἴκιον ἄκρον, being about 20 Miles or half a degree of Longitude to the East, or $\frac{2}{5}$ of the whole Coast of *Flanders*, which he makes but a degree and quarter from the *Acron Icion* to the mouth of the *Scheld* which he calls *Ostia Tabudæ*: As also for that *Pliny* l. 4. c. 16. speaking of *Gessoriacum*, says the *Proximus Trajectus* into *Britain* from thence is 50 Miles, which is too much unless *Gessoriacum* were something more Easterly than *Calais*. *Dion Cassius* makes the distance between *France* and *Britain* 450 *stadia* or 56 Miles, and says likewise 'tis the neareſt, τὸ ζωλομώτατον. But this is in part amended by the explication given in the *Itinerary* of *Antoninus*, where the space between *Gessacorum* and *Rutupium* is said to be 450 *stadia* (for this was the ordinary passage of the *Romans* into *Britain*,) *Rutupium* being more Northerly and *Gessoriacum* more Easterly than the *termini* of *Cæsars* Voyage, and consequently the distance greater than 30 Miles which *Cæsar* had observ'd; and now lately an accurate Survey has proved the distance between Land and Land to be 26 *English Miles* or 28½ *Roman Miles*, which shews how near *Cæsars* estimate was to the Truth.

A farther Argument (but not of equal force with the former because of the modernness of the Author, who writ above 250 Years after) may be drawn from the words of *Dion Cassius*, where he says ἄνεμον τινὰ περίεχον ἀνήχθη ἀναπλεύσας ἐτέρωσε παρεκομίσθη, that after his first Anchoring he Sail'd about a Promontory to the place where he Landed: Now there are no other Promontories on all that Coast but the *South-Foreland* and *Dengyness*; the latter of which it could not be, because *Cæsar* says he Sail'd but 8 Miles, and the *Ness* it self is about 10 Miles from the South and neareſt end of the *Chalk-Cliffs* by the Town of *Hith*; and to have gone round that Point to the other side, the distance must have been much greater. So that the Promontory spoken of by *Dion*, must needs be the *South-Foreland*, and *Cæsar* must Anchor near over against *Dover*, from whence Sailing 8 Miles, he would double a Head-land and come to the *Downs*; which is such a Coast as he describes in one place by *apertum ac planum littus*, and in his 5*th* Book by *molle ac apertum littus*. As to *Dions* word εἰς τὰ τενάγη, what I have already said about it seems sufficient to prove that he means no more than the Waters edg; and the *Etymologists* derive it from τέγω *madefacio*, because the wash and breach of the Sea does always keep it wet. And this word τὰ τενάγη is used by *Polybius* for the Sea Ouse; and in another place he speaks of the difficulty of Landing at the mouth of a River, Διὰ τὴν τεναγώδη πάροδον, *ob limosum accessum*, so that it is not to be doubted that it ought to be rendred in this place, *ad vadum maris* rather

rather than *in paludibus*. And so this objection against the assertion that *Cæsar* Landed in the *Downs*, which is known to be a firm Champain Country without Fenns and Morasses, will be removed; and the whole Argument will 'tis hoped be admitted by the Curious.

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